SERVICE MANUAL

(without price)

ELECTRONIC CASH REGISTER

CE-3700 (EX-278)

CE-3750 (EX-279)

DEC, 1994

CE-3700

CASIO

INDEX

CONTENTS

Page

1. SPECIFICATION 1
2. OPTION SPECIFICATIONS 3
3. INSTALLATION 3
4. INITIALIZE 4
5. MAJOR COMPONENT 6
6. BLOCK DIAGRAM 7
7. CIRCUIT EXPLANATIONS 8
8. DISASSEMBLY / ASSEMBLY METHOD 12
9. DIAGNOSTIC OPERATION 13
10. PROGRAMMING THE CE-3700 SERIES CASH REGISTERS 17
11. OPERATION 19
12. ERROR CODES 20
13. IC DATA 21
14. PCB LAYOUT 22
15. CIRCUIT DIAGRAM 23
16. PARTS LIST 33

Product introduction

This machine CE-3700(EX-278) is a succession machine for CE-3400(EX-253).
The simultaneous boot model is EX-279.

EX-278: The drawer not separation type.
EX-279: The drawer separation type.

The Rom/Ram is the internal organs.

1. SPECIFICATION

1-1. Product

Operating temperature:	0 °C	~	40 °C
Operation air moisture:	10 %	~	90 %
Storage temperature:	-25 °C	~	65 °C
Storage air moisture:	10 %	~	95 %
Bombardment strength:	To add bombardment from 10 high cm by single support, and there isn't the problem.		

1-2. Package status

Storage temperature:	-25 °C	~	65 °C
Storage air moisture:	10 %	~	95 %
Vibration strength:	1.5 G		
Bombardment strength:	To add bombardment from 60 high cm by single support, and there isn't the problem.		

1-3. Accessory specifications

Roll paper:	P-4575 (EX-P-4574), 45 X 12 X 30 D
Stamp logotype:	CSP-2030ASA-2
Ink for supplement:	Super Ink KC
Ink roll:	IR-92 (EX-INK-IR-92-OP)
Dust cover:	Only 1 part neighborhood

1-4. Printer

CR-812A-009-14-001A:	Europe
CR-812A-009-15-001A:	USA, Canada, UK, Europe

Printing type:	ring select mode	
Output sheet number:	2	
Chart specifications		
Paper width:		44.5 ± 0.5 mm
Maximum paper diameter:		Ø 83 mm
Maximum paper thickness:		0.06 ~ 0.085 mm
Materials:		Regular paper
Inking:	Ink roll	
Validation		
Print specifications:		Yes
Sensor:		No
Paper cut:	Manual	
Stamp		
Color:		Purple
Seal side dimension:		30 mm (W) X 20 mm (H)

1-5. The durability specifications

Switch

Key board switch:	5,000,000 times
Control lock:	20,000 times
Operation key	100,000 times
Feed switch	5,000,000 times
Receipt on/off switch	10,000 times
Reset switch	100,000 times

Drawer:

1,000,000 times

Printer

MCBF:	2,000,000 line
Ink roll	400,000 line
Stamp	
Ink:	50,000 times
mechanism:	500,000 times

1-6. Electric specifications

Power consumption

Area		120 V	220 V	230V	240V
In action	Max.	0.40 A	0.20 A	0.20 A	0.20 A
In holding	Min.	0.09 A	0.05 A	0.05 A	0.05 A
Power off		0.08 A	0.04 A	0.04 A	0.04 A

1-7. Memory Protection

Protection battery: Vanadium Lithium secondary battery
Model: VL3032/IF2

Guard period: 90 days (25 °C) In perfection charge status

Galvanic cell life expectancy: 5 years

Recharge time: 48 hours in secondary battery

CAUTION
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacture's instructions.

1-8. Clock, date facility

Clock precision: Less than ±30 seconds (25 °C)
Automatic calendar: Until 2099

1-9. Electric power supply for an emergency (B-6)

Operating hour: 3 hours

Driving condition

Processing time per customer one person: 60 sec./ person

Purchase item number: 10 item / person

1 item registration amount of money number of digits: 4 digits / item

The handling number of people for 1 hour: 30 person /hour

Recharge time: 8 hours

2. OPTION SPECIFICATIONS

2-1. Ink roll: IR-92

2-2. Waterproofing cover: WT-70

2-3. Roll paper: P-4575 (45×12×75D)

2-4. Electric power supply for an emergency: B-6

The parts for adding B-6 are not equipped. They should be ordered separately from service department.

The following parts are necessary to add B-6.

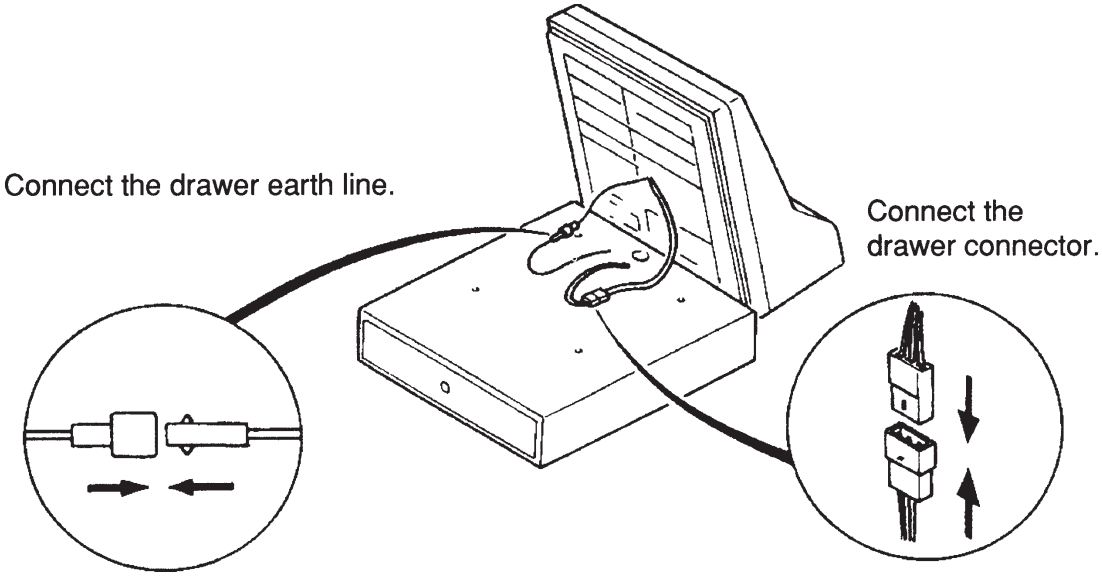
No.	Code No.	Parts Name	Specification	Q'ty
Q1	2200 3577	Transistor	2SA1015(GR,O,Y)	1
ZD1	2310 8879	Zener diode	RD18EB1	1
D6,D7	2301 0011	Diode	1S2471	2
C5	2804 5476	Electrolytic capacitor	50RE47	1
R2,R3,R5	2600 7313	Carbon film resistor	R-25-10K-J	3
R1	2600 5612	Carbon film resistor	R-25-2K-J	1
	6221 4218	Connector sub assembly	E311294-1(#22)	1

2-5. Keyboard Conversion Kit: CVK-S2/-L2/-LLL2/-FS2

2-6. Ink for supplement Super ink K

3. INSTALLATION

Connection is done of earth-line of drawer and main frame like lower chart.



4. INITIALIZE

By Initialize code

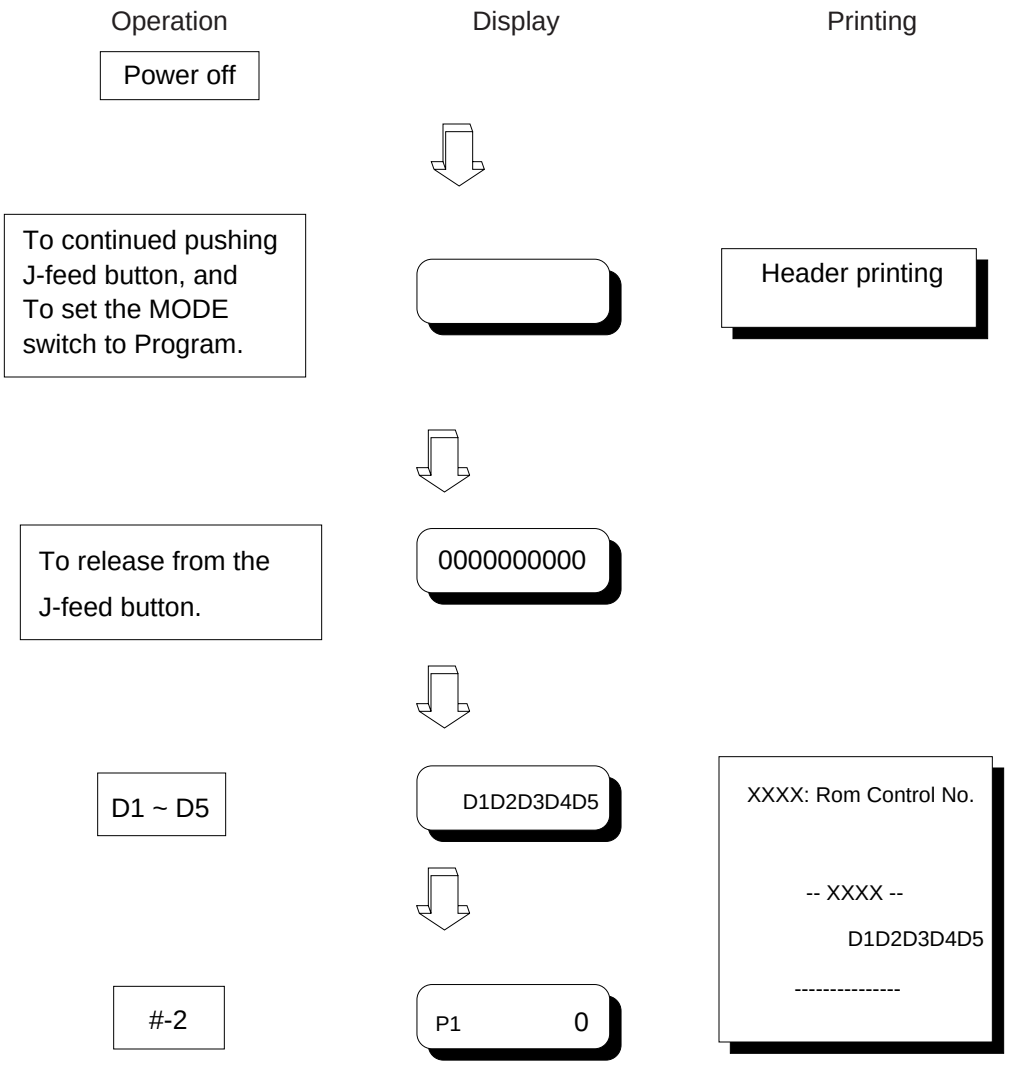
Init. A: The format is done of EEPROM, and, without it is read, and Init. Code is written in.

Init. B: The data is read from EEPROM.

4-1. MAC

To hang initial start-up of CPU and peripheral device, and All Clear makes memory.

When there is Data backed up by EEPROM, by Initialize code, to develop it on Memory top.

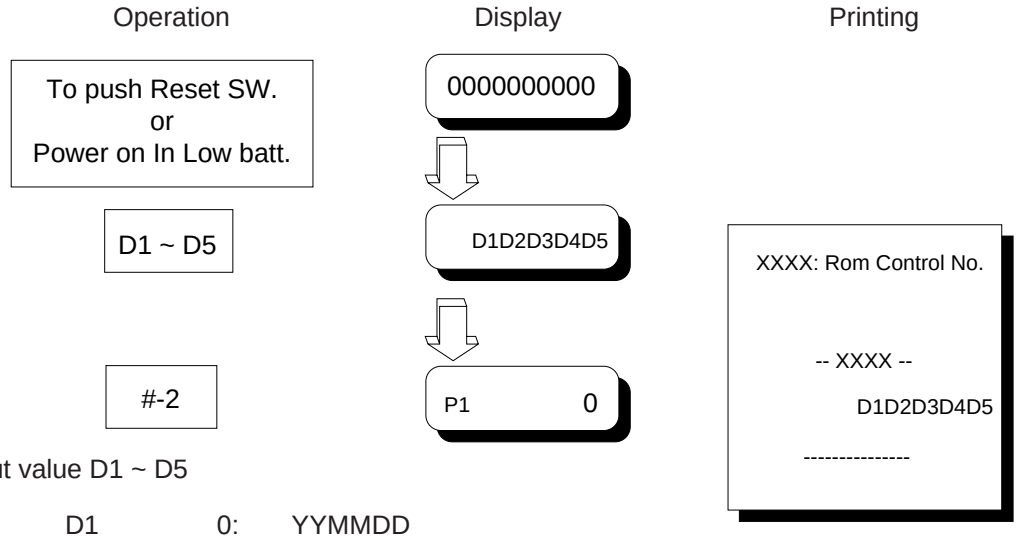


Input value D1 ~ D5

D1	0: YYMMDD		
	1: MMDDYY		
	2: DDMMYY		
D2	1: General	(Add2, DDMMYY)	
	2: US	(Add2, MMDDYY)	
	3: General	(Add3, DDMMYY)	
	5: Canada	(Add2, MMDDYY)	
D3,D4	Department No.	General	15
		US	30
D5	Clerk specification	Switch:	1,2,4
		Password No.:	0 (U.S.A. & Canada)

Note: Operation code with Init.B is set up as with settlement in “00000”

4-2. Auto or Reset switch initialize



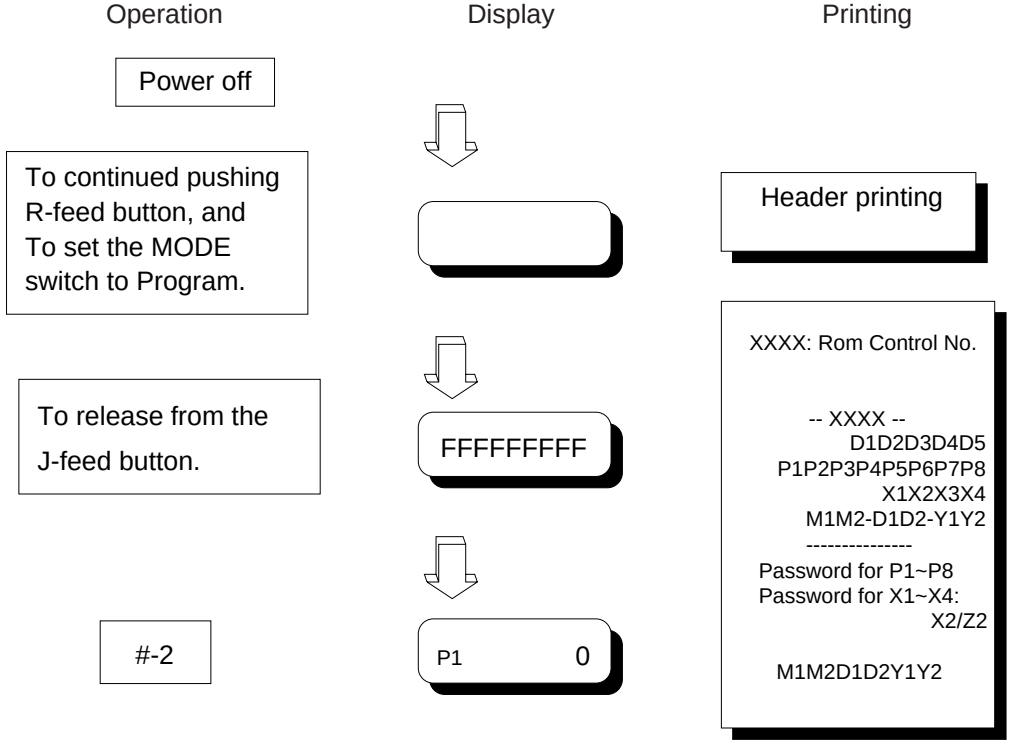
Input value D1 ~ D5

D1	0: YYMMDD		
	1: MMDDYY		
	2: DDMMYY		
D2	1: General	(Add2, DDMMYY)	
	2: US	(Add2, MMDDYY)	
	3: General	(Add3, DDMMYY)	
	5: Canada	(Add2, MMDDYY)	
D3,D4	Department No.	General	15
		US	30
D5	Clerk specification	Switch:	1,2,4
		Password No.:	0 (U.S.A. & Canada)

Note: Operation code with Init.B is set up as with settlement in “00000”.

4-3. Flag clear

To do Initialization of work memory, and make the operation sequence with the latest status.



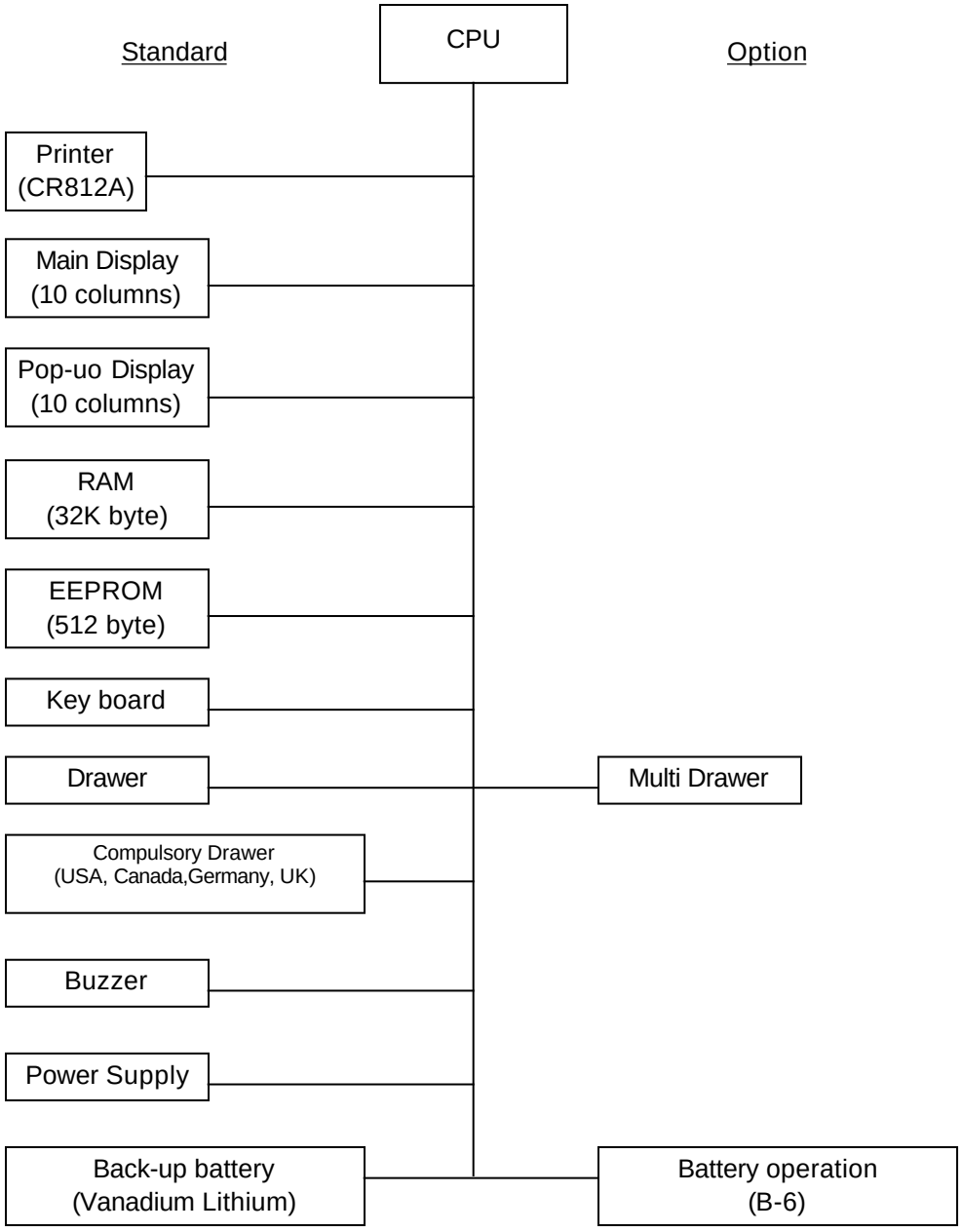
5. MAJOR COMPONENT

CPU		UPD78044AGF080-3B9	
Ram		LC36256PLL	
		256K bit	SRam
Printer	Model	CR812A-009-15-001A	
	MCBF	2,000,000 lines	
Drawer	USA	DL-2416	D-15TC-A55SP-1*
	Canada	DL-2351	D-15TC-A54SP-1*
	UK	DL-2751	D-15TC-A84SP-1*
	Other Countries	DL-2350	D-15TC-A54P-1*
		DL-2750	D-15TC-A84P-1*
	Germany	DL-2752	D-15BC-A84S-1*

CPU Pin Description

Pin No.	Port No.	Name	In/ Out	Description	Pin No.	Port No.	Name	In/ Out	Description
1	94	FIP6	O	Display Digit Signal (Dg7)	41	32	TO2	O	Receipt Common Signal
2	93	FIP5	O	Display Digit Signal (Dg6)	42	31	TO1	O	Auto cutter
3	92	FIP4	O	Display Digit Signal (Dg5)	43	30	TO0	O	Stamp
4	91	FIP3	O	Display Digit Signal (Dg4)	44	3	INTP3	I	Drawer sensor
5	90	FIP2	O	Display Digit Signal (Dg3)	45	2	INTP2	I	Key scan timing plus
6	81	FIP1	O	Display Digit Signal (Dg2)	46	1	INTP1	I	Power Down
7	80	FIP0	O	Display Digit Signal (Dg1)	47	0	INTP0	I	Printer
8				Power (VDD)	48				Gnd for Vpp (IC)
9	27	SCK0	I/O	Data 7	49	70		O	Address decoder (A12/D0)
10	26	SO1	I/O	Data 6	50	71		O	A13/Decod1
11	25	SI0	I/O	Data 5	51	72		O	A14/Decod1
12	24	BUSY	I/O	Data 4	52				Power (VDD)
13	23	STB	I/O	Data 3	53	127	FIP33	O	Printer Head (HD8)
14	22	SCK1	I/O	Data 2	54	126	FIP32	O	Printer Head (HD7)
15	21	SO1	I/O	Data 1	55	125	FIP31	O	Printer Head (HD6)
16	20	SI1	I/O	Data 0	56	124	FIP30	O	Printer Head (HD5)
17				Reset Signal	57	123	FIP29	O	Printer Head (HD4)
18	74		O	CE(Ram Chip Enable)	58	122	FIP28	O	Printer Head (HD3)
19	73		O	R/W(Ram Write Enable)	59	121	FIP27	O	Printer Head (HD2)
20				Analog electric potential of AD converter (Gnd)	60	120	FIP26	O	Printer Head (HD1)
21	17	ANI7	I	Key Input Signal (KI7)	61	117	FIP25	O	Printer Head (HD10)
22	16	ANI6	I	Key Input Signal (KI6)	62	116	FIP24	O	Printer Head (HD9)
23	15	ANI5	I	Key Input Signal (KI5)	63	115	FIP23	O	Printer J-feed
24	14	ANI4	I	Key Input Signal (KI4)	64	114	FIP22	O	Printer R-feed
25	13	ANI3	I	Key Input Signal (KI3)	65	113	FIP21	O	Printer Motor
26	12	ANI2	I	Key Input Signal (KI2)	66	112	FIP20	O	Key Common Signal (KC9)
27	11	ANI1	I	Key Input Signal (KI1)	67	111	FIP19	O	Display Digit Signal / Key Common Signal (SGdb/KC8)
28	10	ANI0	I	Key Input Signal (KI0)	68	110	FIP18	O	Display Digit Signal / Key Common Signal (SGtr/KC7)
29				Analog electric power supply of AD converter (Vcc)	69	107	FIP17	O	Display Digit Signal / Key Common Signal (SGg/KC6)
30				Reference voltage input of AD converter (Gnd)	70	106	FIP16	O	Display Digit Signal / Key Common Signal (SGf/KC5)
31				Clock Terminal	71				Pull Down electric potential for Fip (VN)
32				Clock Terminal	72	105	FIP15	O	Display Digit Signal / Key Common Signal (SGe/KC4)
33				Analog electric potential of AD converter(Gnd)	73	104	FIP14	O	Display Digit Signal / Key Common Signal (SGd/KC3)
34				System Clock 4.19MHz	74	103	FIP13	O	Display Digit Signal / Key Common Signal (SGc/KC2)
35				System Clock 4.19MHz	75	102	FIP12	O	Display Digit Signal / Key Common Signal (SGb/KC1)
36	37		O	EEPROM CE	76	101	FIP11	O	Display Digit Signal / Key Common Signal (SGa/KC0)
37	36	BUZ	O	Buzzer	77	100	FIP10	O	Key Scan Timing Plus
38	35	PCL	O	Decoder CE	78	97	FIP9	O	Display Digit Signal (Dg10)
39	34	TI2	O	DW1&2	79	96	FIP8	O	Display Digit Signal (Dg9)
40	33	TI1	O	Journal Common Signal	80	95	FIP7	O	Display Digit Signal (Dg8)

6. BLOCK DIAGRAM

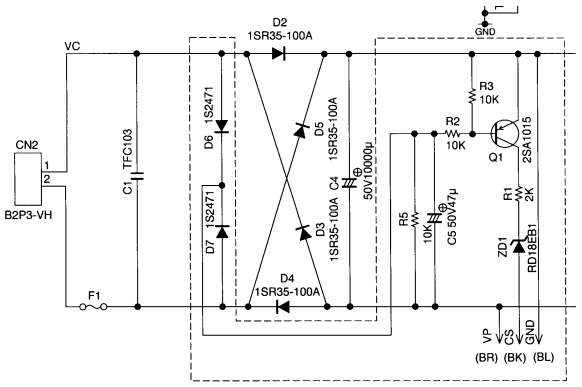


7. CIRCUIT EXPLANATIONS

7-1. Power supply circuit

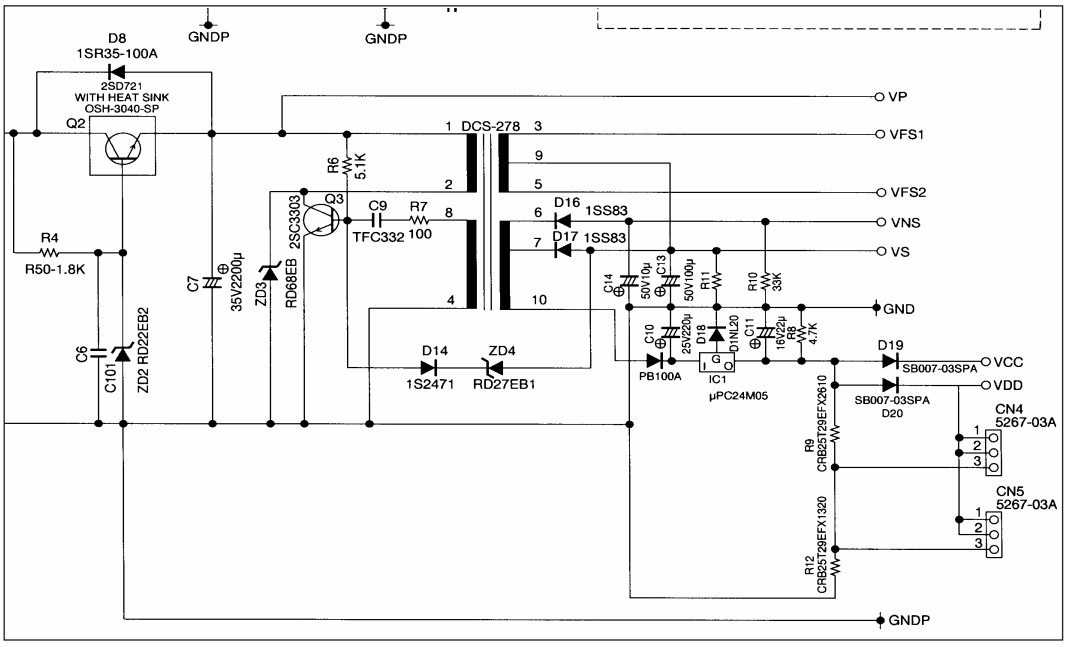
1) Diodes rectification bridge
By diodes rectification bridge, alternating voltage is converted into DC voltage, and the electrical voltage is done filtering of by Capacitor C4.

2) Power supply circuit for B-6
The electrical voltage which puts in resistor 3 when line voltage includes anomaly changes, and transistor Q1 becomes on status, and CS signal is done outgoing of by this, and VP is supplied than Power supply B-6.



Note: The component for connection isn't equipped with in plant shipping.
(service arrangement)

7-2. DC/DC converter circuit



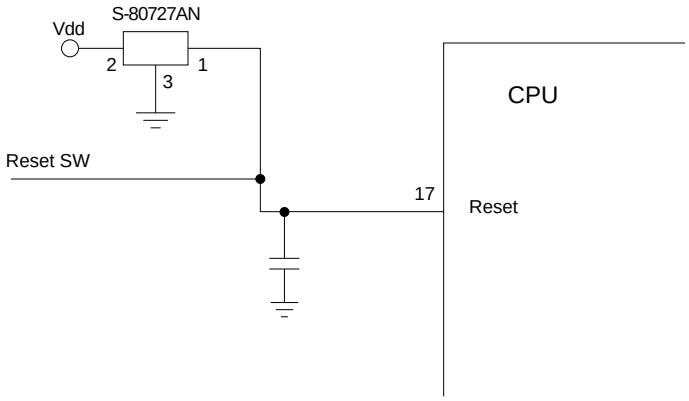
2SD721(Q2) is Power voltage control transistor, and electric power supply is supplied in DC-DC converter with 2SC3303(Q3). 2SC3303(Q3) does a work as oscillator. The frequency of 2SC3303(Q3) is controlled by signal done feed back of through RD27EB1.

7-3. Electrical voltage value in check point

	Vc	Vp	Vcc/Vdd	Vns	Vs	Vf
Rated output electrical voltage	Min: 23 V	20 V	5 V	32 V	27 V	4.75 V
Output voltage drift range	Max: 42 V	2 V	0.3 V	10%	10%	7%
Output voltage drift range	AC	DC	DC	DC	DC	AC

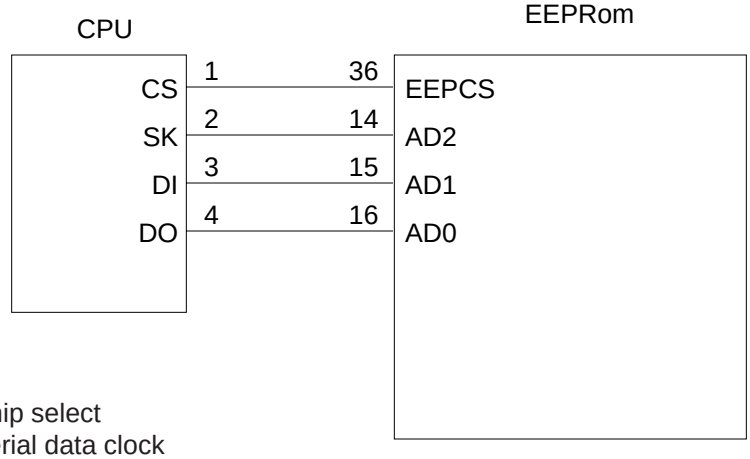
7-4. Reset circuit

The voltage fluctuation of VDD is controlled of IC10 (S-80727AN).
CPU is done Reset by pushing Reset Switch or drifting VDD.



7-5. Data communication between CPU and EEPROM IC11(BR93LC46A).

EEPROM is Rom that write / erase is possible electrically.
BR93LC46A is a non- volatile register, and serial data of 16 bit can be memorized with 64 register.

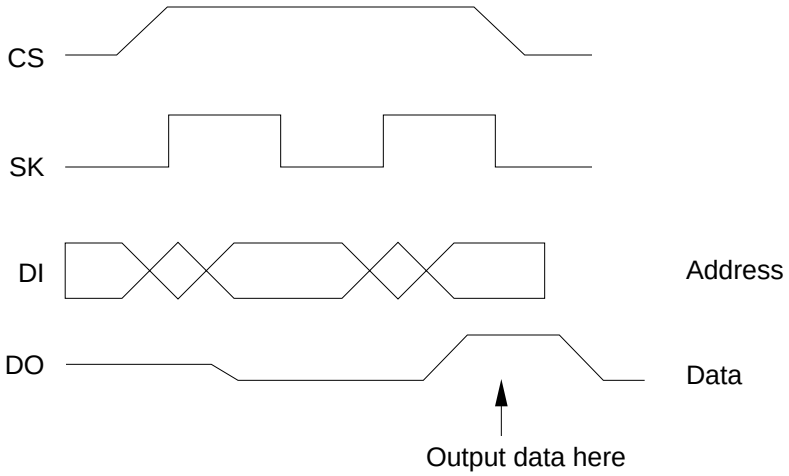


CS: Chip select
SK: Serial data clock
DI: Serial data input
DO: Serial data output

64 words X 16 bits 1,024 bits

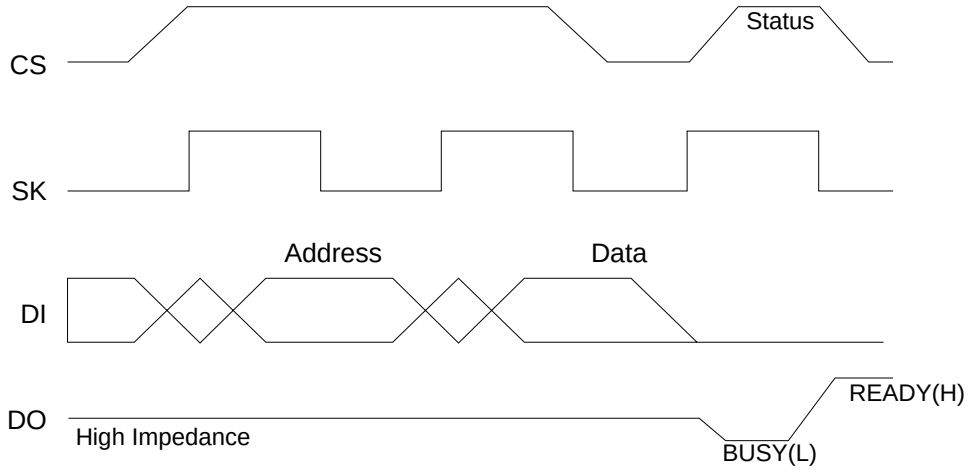
[Data reading procedure]

When the CPU read the data of EEPROM, CPU send the CS signal and SK signal to EEPROM.
Then CPU send the address to EEPROM, and then EEPROM return the data to CPU.



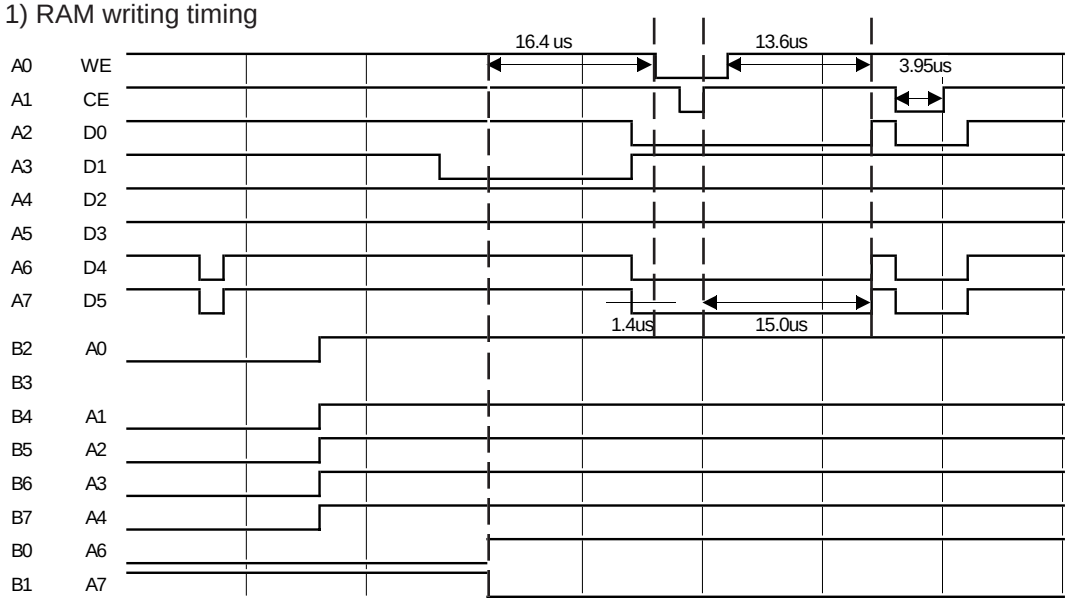
[Data writing procedure]

When the CPU save the data to EEPROM, CPU sends the CS and SK signal to EEPROM.
And CPU send the address and data to EEPROM from pin No. 15.
When the EEPROM writes the data, EEPROM outputs the busy signal form DO terminal to CPU.
After finish writing, EEPROM outputs the ready signal from DO terminal to CPU.

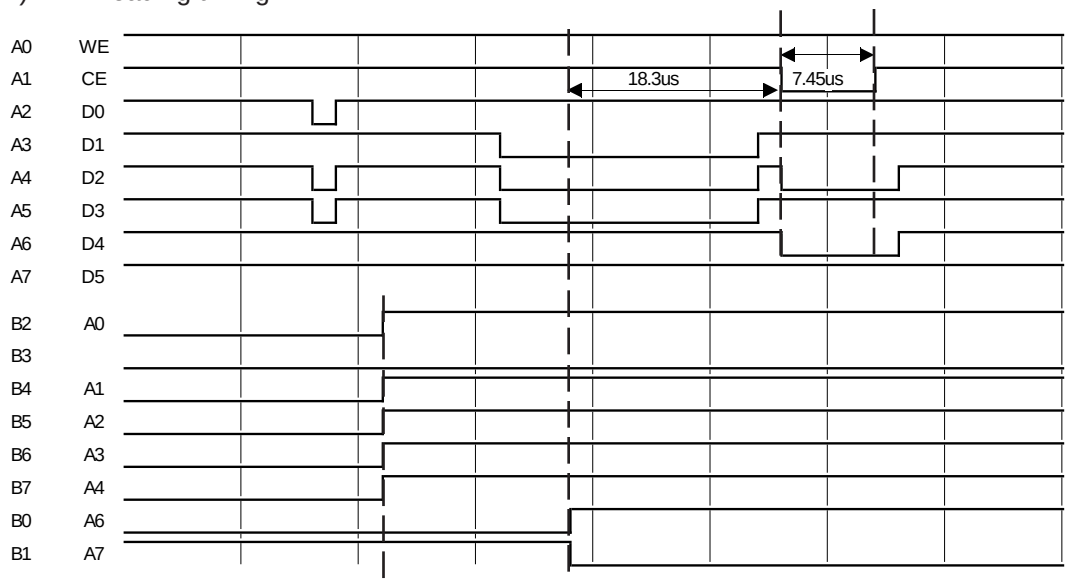


7-6. Time chart

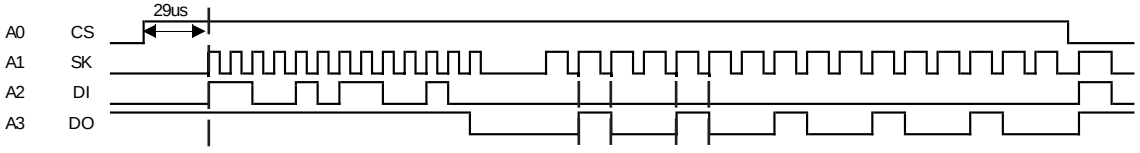
1) RAM writing timing



2) RAM reading timing

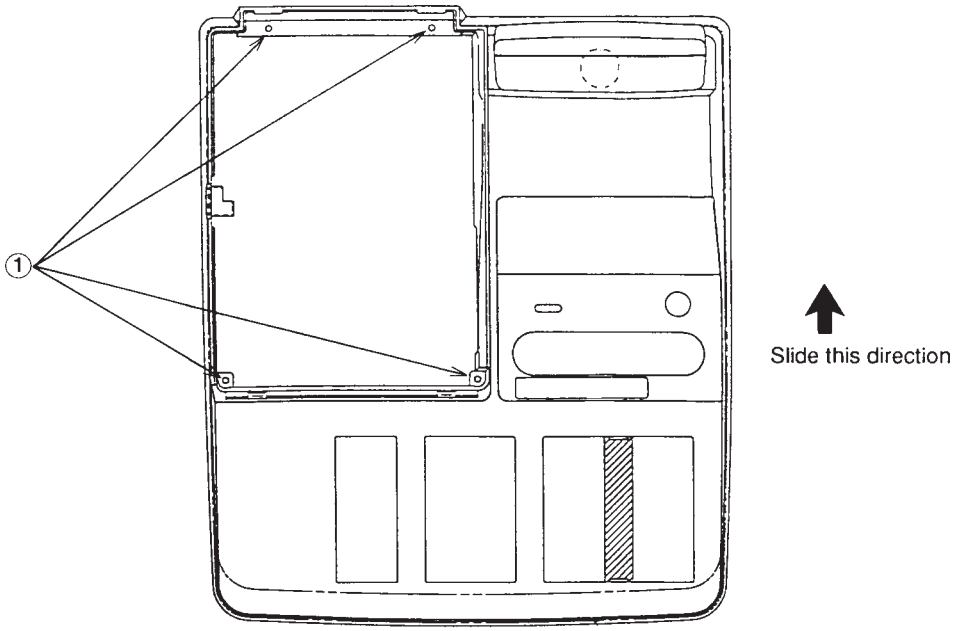


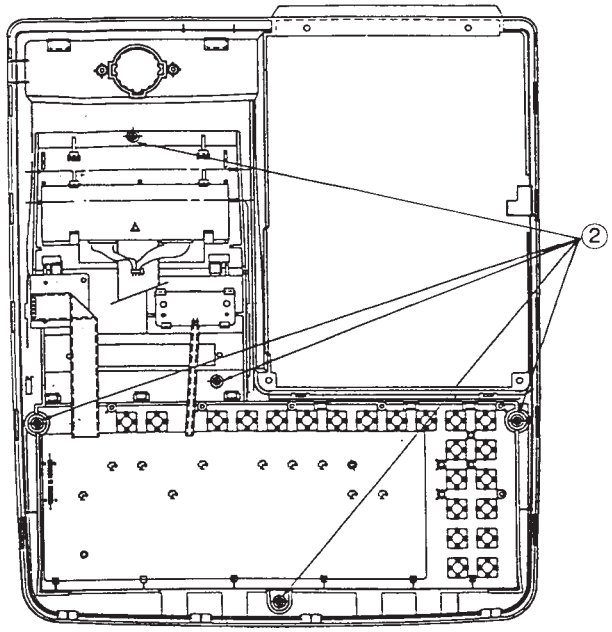
3) EEP-ROM Writing and reading timing



8. DISASSEMBLY / ASSEMBLY METHOD

1) Remove the Printer cover.
2) Upper case can remove it from by 4 places screws of printer four corners. (Lower chart ① reference)
3) It comes off while sliding of Upper case backward by raising it.
4) Key board can remove it from by 4 places screws. (Lower chart ② reference)





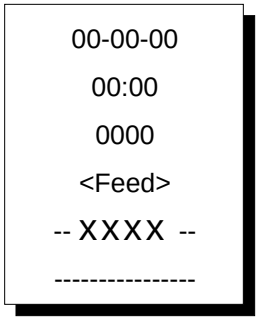
9. DIAGNOSTIC OPERATION

9-1. Start-up method

By the next operation, EX-278 enters Test mode.

1) Mode switch off.
2) To continued pushing J-feed button.
3) To set the Mode switch to Program.
4) To release from the J-feed button.
5) To input **9 9 9 9 9 0 0 0 0 0 #2**

Printing out



X: "Version No." or "- - • • • • - -"

The cancellation of test mode do INIT.

9-2. Description

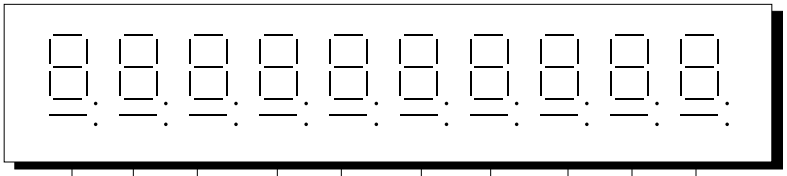
1) Key code representation: expect Value number, Clear and Feed button.
2) Various switches status display
3) Testing for Display, Print, DRW, RAM: Value number 1 column + #2
4) Testing for E2PROM: Value number 1 column + #2

9-3. Key code representation

RF	JF	062	C	055	053	051	045	039	033	027	021	018
072	067	061	056	054	052	050	044	038	032	026	020	017
071	066	060	7	8	9	049	043	037	031	025	019	016
070	065	059	4	5	6	048	042	036	030	024	014	015
069	064	058	1	2	3	047	041	035	029	023	075	073
068	063	057	0	011	012	046	040	034	028	022	074	013

013: #1 key
014: #2 key

9-4. Various switch status display



0: Fixed

For Taiwan
1: Journal mark sensor
0: Except it

For Taiwan
1: Receipt mark sensor
0: Except it

1: Fixed
Non taxable pad For Japan
0: Taxable (pat short)
1: Non-taxable (pat open)

Drawer sensor
0: Open
1: Close

Journal near end
1: Near end
0: Out of sense

Receipt off switch
0: Receipt on
1: Receipt off

Key clerk
0: Non
1~9, A~F:Clerk code (Hexadecimal representation)

Push clerk
0: Non
1: Clerk 1
2: Clerk 2
3: Clerk 3
4: Clerk 4

Mode representation
1: PGM
2: RF
3: REG1
4: REG2
5: X
6: Z
7: X2Z2
8: Off
0: Disconnected

9-5. Print, Display, Drawer and Ram testing to do a various test by value number key. The following code print by all means then.

1 #	1 #2: All testing
3 #	3 #2: E^2PRom r/w testing
4 #	4 #2: E^2PRom reading testing
5 #	5 #2: Ram reading testing
96 #	96 #2: E^2PRom Initialization
8 #	8 #2: Printing testing
9 #	9 #2: Clock testing

1) [1] [#2] All lighting, Ram, R/W, setting the time and date, drawer opening, printing, receipt(Japan) stamp and receipt issue.

Display: All lighting

Ram: R/W

normal end: To be continued

Abnormal end: To do the following printing then breaking

```
- - - - - - - 2
```

Receipt printing

Beeping one shot buzzer on

Setting date and time:

Date: Dec. 31st 1994

Time: 23:59

Drawer open:

Drawer No.1 and No.2 are opened.

Test printing:

To do the following print

The first line does print in receipt, journal independence.

The second line does print at receipt, journal same time.

```
01234567FS@
01234567FS@
```

Receipt stamp: (only japan)

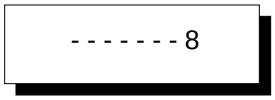
Receipt issue:

Testing display: To do indication as follows till key or a state changes

```
1234567890
```

2) [3] [#2] This does R/W test of testing area of E^2PRom during single word, and, at the time of normal, does normal termination print.

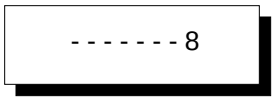
Abnormal end: To do the following printing then breaking



Receipt printing
Beeping one shot buzzer on

3) [4] [#2] This does read only test of testing area of EEPRom during single word. This test is continued till off mode or electric power supply enters it.

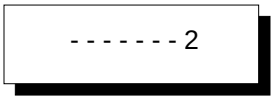
Abnormal end: To do the following printing then breaking



Receipt printing
Beeping one shot buzzer on

4) [5] [#2] Read only test .
Outside Ram(0000_H~$7FFF_H$) read in testing
The address comparing data which comes under it
= (A0-A7) + (A8-A14)
This test is continued till off mode or electric power supply enters it.

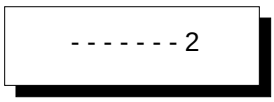
Abnormal end: To do the following printing then breaking



Receipt printing
Beeping one shot buzzer on

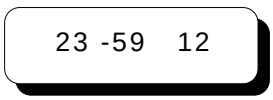
5) [9] [6] [#2] Blanking (OFFH writing) of data in EEPRom entirely.
Time of day, a date are turned into zero entirely.

6) [8] [#2] All time ring print testing



Receipt printing

7) [9] [#2] Time of day representation testing



Time of day indication is done till clear Key

10. PROGRAMMING THE CE-3700 SERIES CASH REGISTERS

The Casio CE-3700 series is capable of a versatile range of features and function that give it the capability to readily adapt to almost any retail environment. The cash register is programmed at the factory with the most standard operating features and functions. Your local business requirements, however, may call for other functions of a totally different keyboard layout.

This section explains the different functions available, as well as the procedures that you can use to tailor the cash register to specific needs. Programming is simplified through the use of worksheets for each function, and step-by-step flow charts that walk you through each procedure.

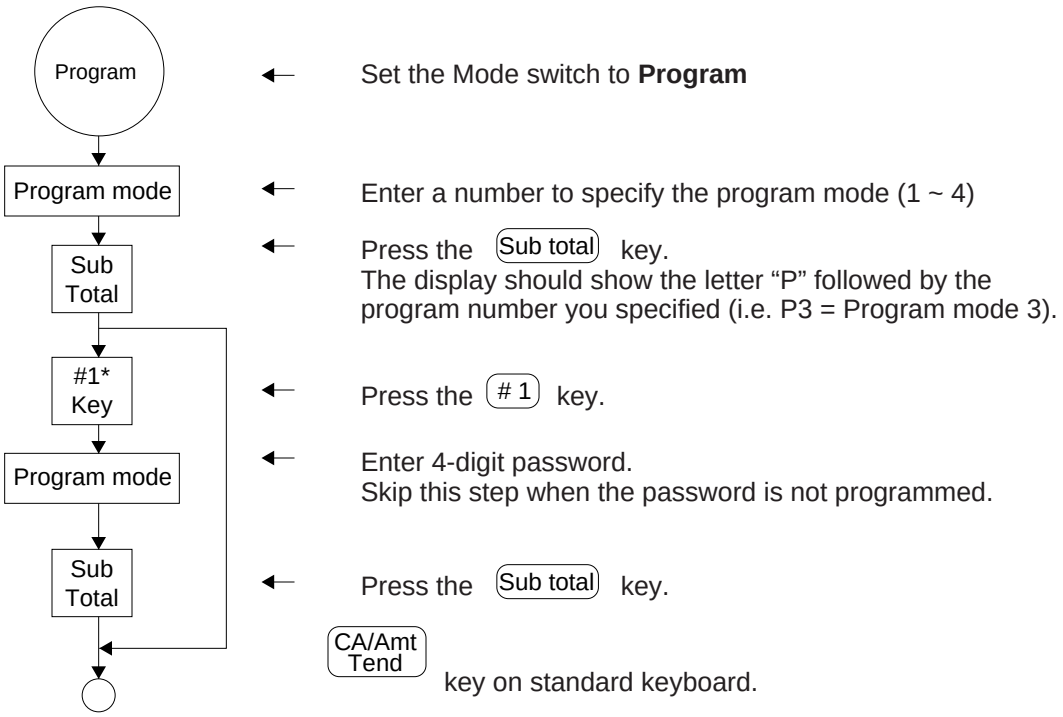
10-1. Setting the proper MODE for programming

• Program Modes and feature

Mode	Purpose	Mode indicator
Program 4	Assignment of 89 functions to programmable keys to create the desired keyboard layout	P4
Program 3	Definition of machine features and key functions that enhance printing, totalizing, reporting and overall operation	P3
Program 1	Programming of time, date and unit prices, amounts, rates, etc. for enhanced security and automatic registration	P1

You should perform the procedure shown blow as the first step of programming. Notice that the flowchart ends with an arrow on the bottom. This indicates that you should continue to the next programming procedure for the mode you specify.

• Procedure


Program
Program mode
Sub Total
#1* Key
Program mode
Sub Total
Set the Mode switch to **Program**
Enter a number to specify the program mode (1 ~ 4)
Press the Sub total key.
The display should show the letter “P” followed by the program number you specified (i.e. P3 = Program mode 3).
Press the # 1 key.
Enter 4-digit password.
Skip this step when the password is not programmed.
Press the Sub total key.
CA/Amt Tend key on standard keyboard.

Note: Program mode 1 is automatically set when the Mode switch is set to Program from another setting.

- **Recommended programming sequence**
  Generally, you should perform programming in the following sequence. Note that we recommend you check what is programmed for each mode before proceeding to the programming operation.

① Use **Program 4** to read the assignment of functions to programmable keys and then make changes.
② Use **Program 3** to read the definition of machine features and key functions and then make changes.
③ Use **Program 1** to read programming of time, date and unit price, amounts, rates, etc. and then make changes.

10-2. Using the worksheets

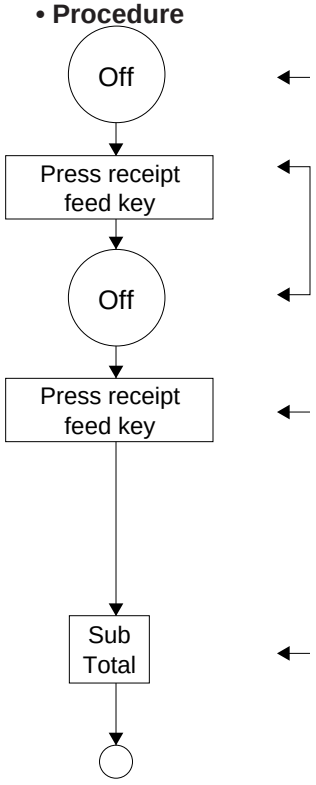
The worksheets included in this manual for **Program 3** and **Program 1** help to make your programming simple and accurate. We recommend that you fill out the pertinent worksheet before attempting actual programming.

1) Carefully read each definition and specify a selection.
   Each definition is following by a **Specification** column which contains numeric values(Usually to indicate a simple YES or NO answer). Determine the correct value according to your need and enter it in the **Selection** column to the right.
2) Total each set of selections to calculate each program code digit.
   Three selections(a,b,c) make up a set. Add up each set of selections and fill in the totals in the **Program code** column for data items D8 through D1.
3) Program the feature or function.
   Be sure that you have filled in all of the selections and program code digits for the entire worksheet, and follow the procedure noted for the feature or function you are programming.
4) Check the printed program receipt against the worksheet.
   Perform program read operation in each program mode to print setting which you have programmed, to check then against the worksheet. We recommend that you do so and keep a copy on record to help out should it become necessary for you to change the program.

10-3. Clearing a machine lock up

If you make a mistake in operation, the cash register may lock up to avoid damage to programs and preset data. Should this happen, you can use the following procedure to clear the lock-up without losing any memory data.

• Procedure



Set the Mode switch off.

While holding down the RECEIPT FEED Key, set the mode switch to X1.

Release the RECEIPT FEED key.

You should see “FFFFFFFFFF” on the display. If 10 of F’s are not shown on the display or if another character is shown, immediately set the mode switch to OFF and start from the beginning of this procedure. IF you don’t see “ FFFFFFFFFF” on the display, do not press the Sub total key.

Finalize the procedure.

11. OPERATION

Operation of your cash register is designed to be simple enough to master without any special technical knowledge. Anytime you make a mistake in operation, an error tone sounds and further operation becomes impossible to protect your valuable data. Whenever this happens, you can resume normal operation after pressing the “C” key.

Printing of the symbol “—” can be programmed when the “C” key is operated in the **REG1**, **REG2**, and **RF** modes. The number of the “C” key operations can also be programmed for printing on the general control Read/Reset reports.

As you become familiar with the key layout of the cash register, you may find that your keyboard entries are getting ahead of the receipt and journal printer. But you never need to worry that the cash register will miss anything. A built-in key input buffer memory holds entries for up to eight keys to let the cash register catch up when you slow down or stop.

Another thing you don’t need to worry about is power outages. Your register features built-in rechargeable lithium batteries that return such information as program data, registration records, data, item, and consecutive number.

These and other features and functions of the CE-3700 series electronic cash register make it a welcome addition to any retail environment.

- **Performing daily cash register operations**
  The actual operations that you perform with your cash register will depend in the nature of your own business. The following outline shows the most common operations in the order they are usually performed.

	Operation	Mode switch
1	Confirm that enough receipt and journal paper are present, and load new paper rolls if necessary.	OFF
2	Read daily totals to confirm that the RESET operation was performed for the previous day's totals.	X1
3	Preset unit prices for department keys, PLUs and function keys if necessary.	Program
4	Set the MODE switch to REG and identify a clerk using a clerk secret number.	REG1/REG2
5	Check the date and time set on the cash register.	REG1/REG2
6	Register transaction.	
	Normal sales	REG1/REG2
	Received on account and paid out	REG1/REG2
	Returns	REG1/REG2/RF
7	Perform READ and RESET operation as required, after counting the money in the cash drawer and registering the amount.	
	Read daily sales totals.	X1
	Read periodic sales totals	X2/Z2
	Reset daily sales totals	Z1
	Reset periodic sales totals	X2/Z2
8	Remove the printed journal, reports from the cash register.	REG1/REG2
9	Set the MODE switch to OFF and remove the key.	OFF
10	Empty the cash drawer and leave it open.	OFF
11	Carry the journal, reports and cash to the office.	OFF

12. ERROR CODES

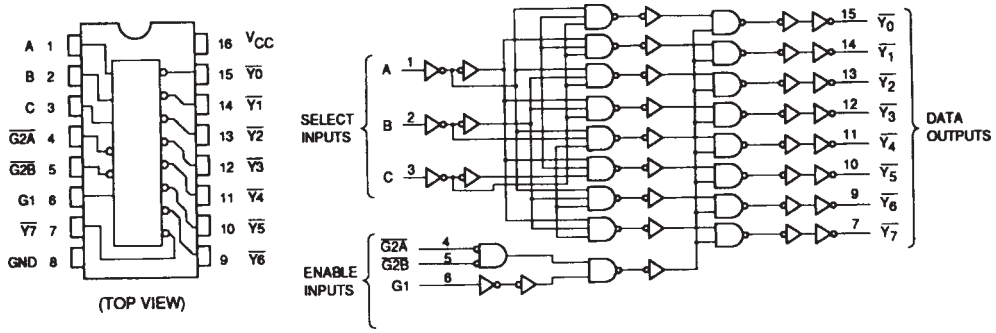
Error codes appear on the display whenever you make a mistake during operation. The following table shows the actual error codes, their meanings, and the actions to take to correct the situation.

Error Code	Meaning	Action
E 01	Position of MODE switch changed before finalizing the current operation.	Return the MODE switch to its original setting and finalize the operation before changing the position of the MODE switch.
E 02	Setting of the receipt ON/OFF button Changed before finalizing of the registration under another setting	Return the receipt ON/OFF switch to its original setting and finalize the transaction changing the setting.
E 03	Prohibited clerk/cashier number(7 ~ 15) is entered during cashier interrupt registration.	Enter correct number (1 ~ 6).
E 04	Initialization or unit lock clear operation in progress.	Complete operation
E 08	Registration without entering the clerk secret number.	Enter the clerk secret number.
E 09	Operation attempted without entering the password in the PRG 1, 3, 4, 6 or X2/Z2.	Enter the password.
E 11	Registration attempted while the drawer of the ECR is open. The drawer is left open longer than the program time (Drawer Open Alarm)	Close the drawer before attempting to perform registration. Shut the drawer to stop the alarm. When the optional compulsory drawer is used.
E 16	Two consecutive transactions attempted in the refund mode.	Switch to another mode and then back to the RF mode for the next transaction.
E 27	Transaction cancel buffer is full.	Finalize the transaction.
E 31	Finalizing of a transaction attempted without confirmation of the subtotal.	Press the "SUB TOTAL" key.
E 32	Finalizing of a transaction attempted without confirmation of the Food stamp subtotal. *	Press the "FS/ST" key.
E 33	Finalize operation attempted without entering the amount tendered.	Enter the amount tendered.
E 35	Change amount exceeds press limit. *	Re-input amount tendered.
E 38	READ/RESET operation attempted without declare of money in drawer. *	Perform money declaration.
E 41	Validation is not performed.	Perform validation operation.
E 94	Printer error	Turn the power off, and remove jammed roll paper from the printer.

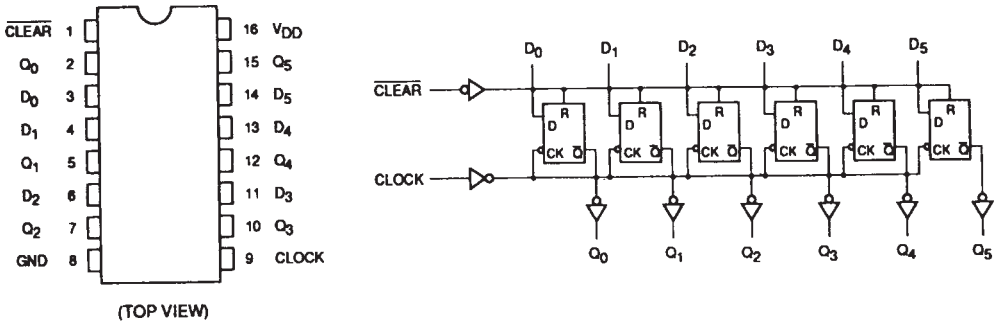
Remark: Denoted * which these error only occur when certain function are programmed as compulsory prohibited.

13. IC DATA

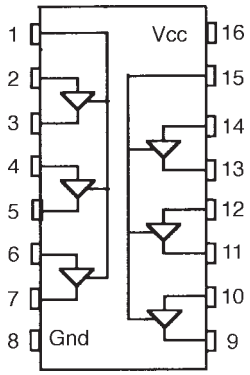
1) TC74HC138



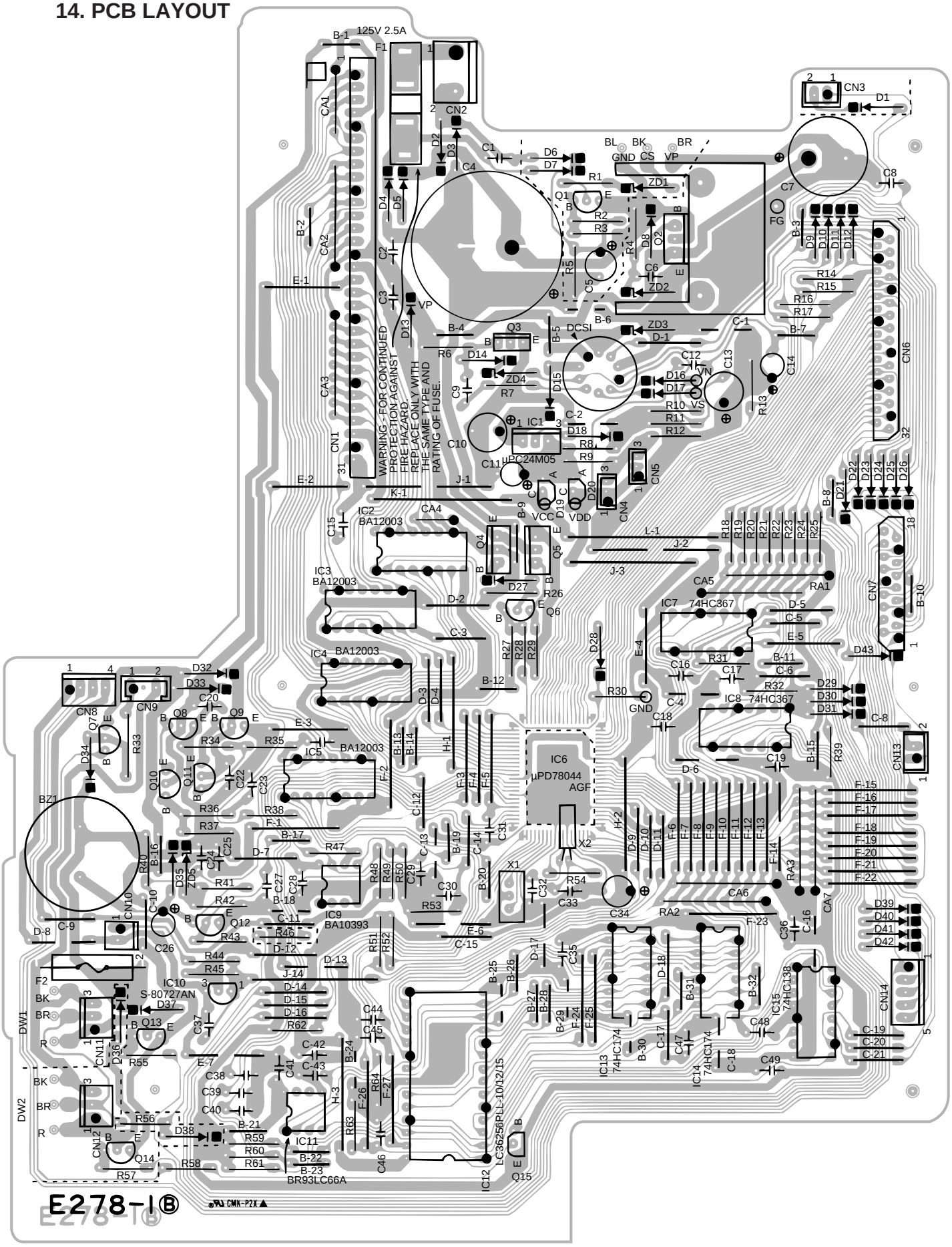
2) TC74HC174



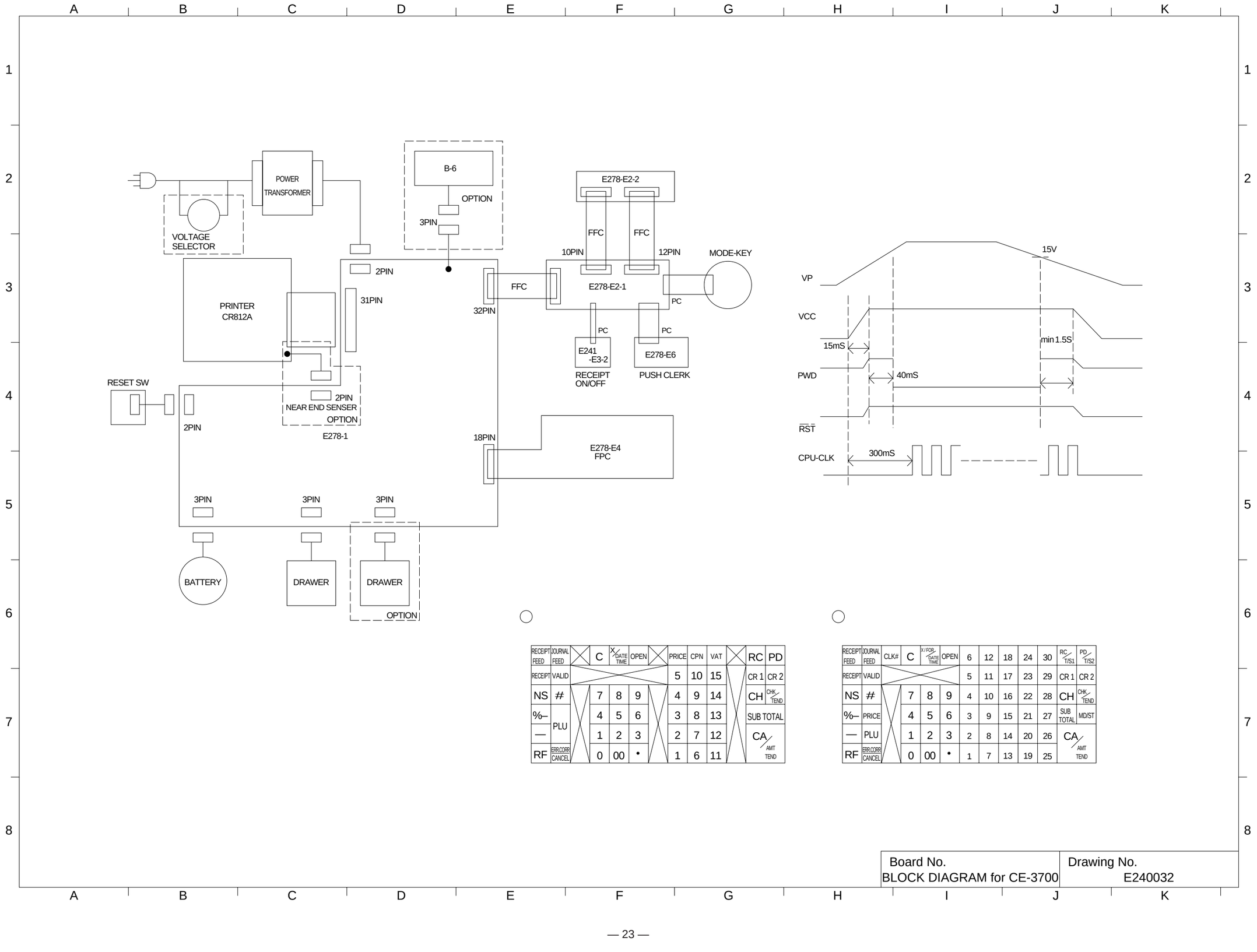
3) TC74HC367



14. PCB LAYOUT



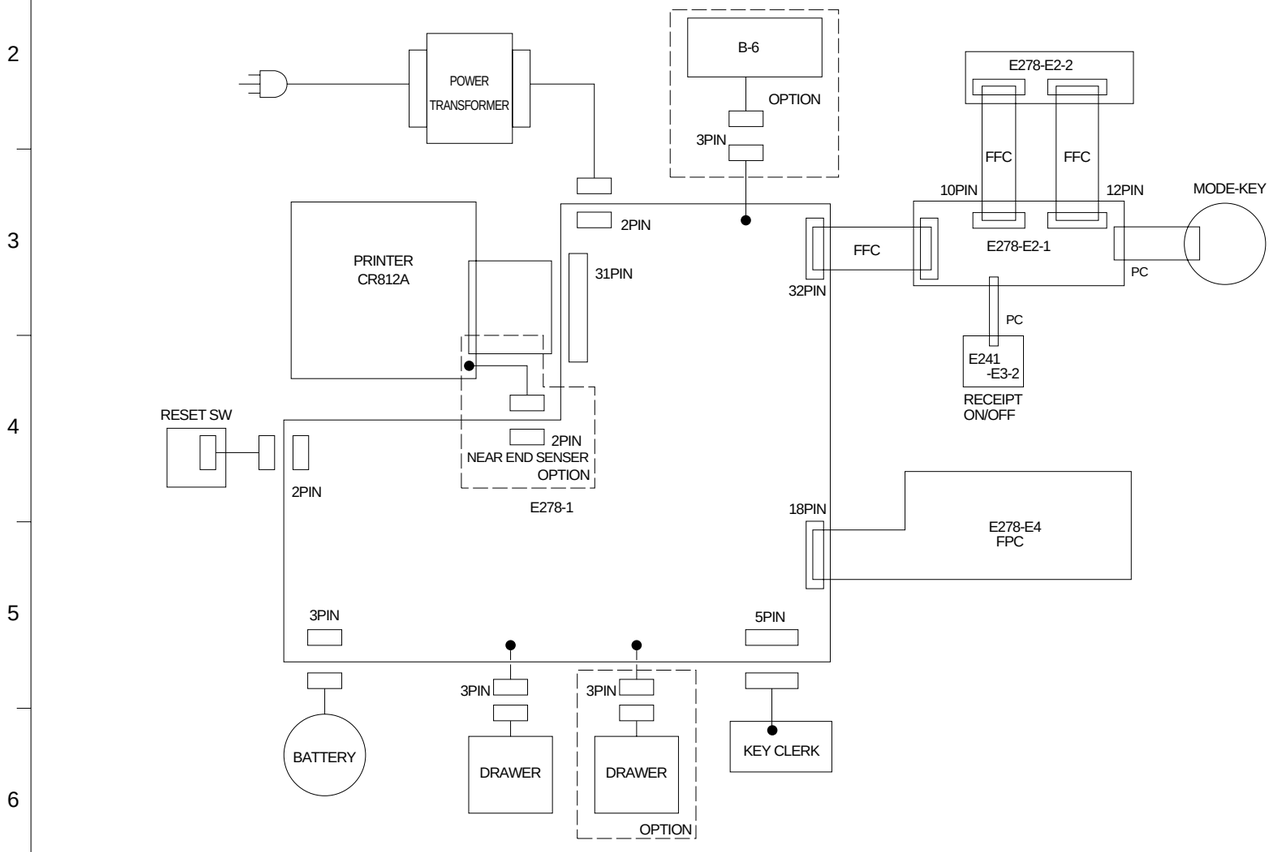
15. CIRCUIT DIAGRAM

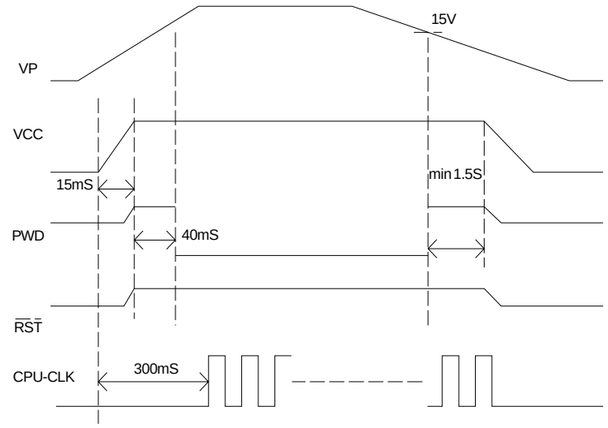


RECEIPT FEED	JOURNAL FEED		C	X DATE TIME	OPEN		PRICE	CPN	VAT		RC	PD
RECEIPT	VALID						5	10	15		CR 1	CR 2
NS	#		7	8	9		4	9	14		CH	CHK TEND
%–		PLU	4	5	6		3	8	13		SUB TOTAL	
—			1	2	3		2	7	12		CA AMT	
RF	ERR.CORR CANCEL		0	00	•		1	6	11		TEND	

RECEIPT FEED	JOURNAL FEED	CLK#	C	X/FOR DATE TIME	OPEN		6	12	18	24	30	RC T/S1	PD T/S2
RECEIPT	VALID						5	11	17	23	29	CR 1	CR 2
NS	#		7	8	9		4	10	16	22	28	CH	CHK TEND
%–	PRICE		4	5	6		3	9	15	21	27	SUB TOTAL	MD/ST
—	PLU		1	2	3		2	8	14	20	26	CA AMT	
RF	ERR.CORR CANCEL		0	00	•		1	7	13	19	25		TEND

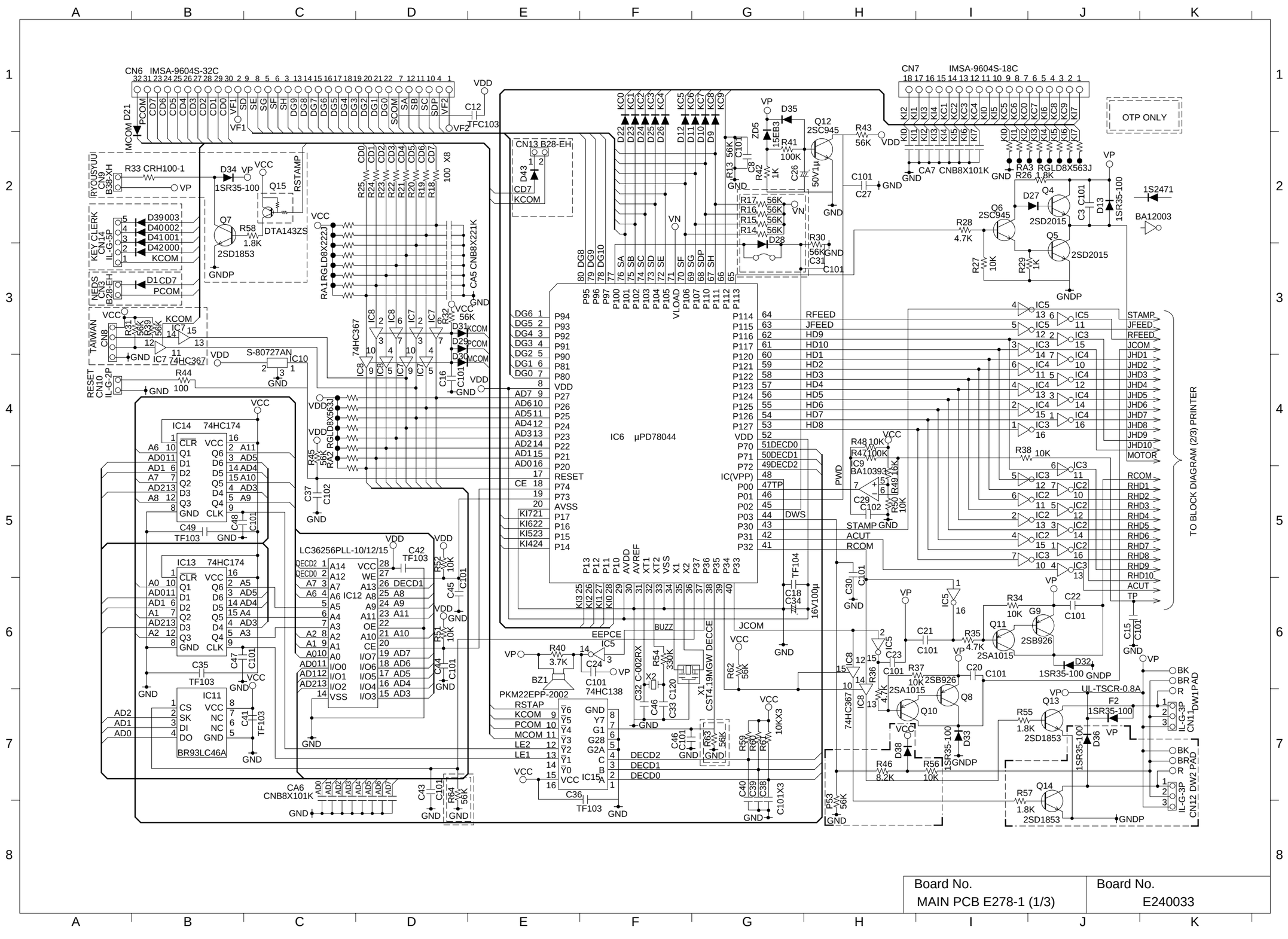
Board No.	Drawing No.
BLOCK DIAGRAM for CE-3700	E240032





RECEIPT FEED	JOURNAL FEED		C	X DATE TIME	OPEN		PRICE	CPN	VAT		RC	PD
RECEIPT	VALID						5	10	15		CR 1	CR 2
NS	#		7	8	9		4	9	14		CH	CHK TEND
%–	PLU		4	5	6		3	8	13		SUB TOTAL	
—			1	2	3		2	7	12		CA AMT TEND	
RF	ERR.CORR CANCEL		0	00	•		1	6	11			

Board No.	Drawing No.
BLOCK DIAGRAM for CE-3750	E240046


CN6 IMSA-9604S-32C
CN7 IMSA-9604S-18C
OTP ONLY
IC6 µPD78044
IC14 74HC174
IC13 74HC174
IC11 BR93LC46A
IC12 LC36256PLL-10/12/15
IC15 74HC138
IC10 S-80727AN
IC9 BA10393
IC7 74HC367
IC8 74HC367
CA5 CNB8X221K
CA6 CNB8X101K
CA7 CNB8X101K
RA1 RGLD8X222J
RA2 RGLD8X563J
RA3 RGLD8X563J
CN8 TAIWAN
CN9 RYOUSYUU
CN10 RESET
CN11 DW1 PAD
CN12 DW2 PAD
CN13 B28-EH
CN14 KEY CLERK
CN3 NEDS
TO BLOCK DIAGRAM (2/3) PRINTER
Board No.
MAIN PCB E278-1 (1/3)
Board No.
E240033

TO BLOCK DIAGRAM (1/3) PRINTER

HBLB31-S2J CN1

STAMP 1
JFEED 2
RFEED 3
JCOM 4
JHD1 5
JHD2 6
JHD3 7
JHD4 8
JHD5 9
JHD6 10
JHD7 11
JHD8 12
JHD9 13
JHD10 14
15
MOTOR 16
RCOM 17
RHD1 18
RHD2 19
RHD3 20
RHD4 21
RHD5 22
RHD6 23
RHD7 24
RHD8 25
RHD9 26
RHD10 27
ACUT 28
29
TP 30
31

VP CA1 CNB5X101K
VP CA2 CNB8X101K
VP CA3 CNB8X101K
VP CA4 CNB3X101K

VP
VCC
C2 TFC103
GND

BA10393 IC9
VP 8
GND 4
C28 TFC103
GND

74HC367*2 IC7 IC8
VCC 16
GND 8
C17 TFC103
C19 TFC103
GND

BA12003*3 IC2 IC3 IC4
VP 9
GND COM 8
GNDP

BA12003 IC5
VP 9
GND COM 8
C25 TFC103
GNDP

RESET SW JPM1030-0101
1 2

KEY CLERK
J-Y7541
5 4 3 2 1

BATTERY VL3032/1F2
1 2 3

D8 1SR35-100A
2SD721 WITH HEAT SINK OSH-3040-SP
Q2

D2 1SR35-100A
D4 1SR35-100A
D6 1S2471
D7 1S2471
D5 1SR35-100A
D3 1SR35-100A
C4 50V10000µ
R3 10K
R2 10K
Q1 2SA1015
R5 10K
C5 50V47µ
R1 2K
ZD1 RD18EB1
VP CS GND
(BR) (BK) (BL)

VC
CN2 1 2 B2P3-VH
C1 TFC103
F1

R4 R50-1.8K
C6 C101
ZD2 RD22EB2

C7 35V2200µ
ZD3 RD68EB
Q3 2SC3303
R6 5.1K
C9 TFC332
R7 100

1 DCS-278 3
2
9
5
6
8
7
4
10

D16 1SS83
D17 1SS83
D14 1S2471
ZD4 RD27EB1

C14 50V10µ
C13 50V100µ
R11
R10 33K
C10 25V220µ
D18 D1NL20
C11 16V22µ
R8 4.7K
PB100A
IC1 µPC24M05

D19 SB007-03SPA
D20 SB007-03SPA

R9 CRB25T29EFX2610
R12 CRB25T29EFX1320

CN4 5267-03A
CN5 5267-03A

VP
VFS1
VFS2
VNS
VS
GND
VCC
VDD
GNDP

Board No.	Drawing No.
MAIN PCB E278-1 (2/3)	E240034

IC1	UPC24M05HF
IC2	BA12003
IC3	BA12003
IC4	BA12003
IC5	BA12003
IC6	UPD78P044GF-080
IC7	TC74HC367AP
IC8	TC74HC367AP
IC9	BA10393
IC10	S-80727AN-Z
IC11	BR93LC66A
IC12	LC36256PLL10/12/15
IC13	TC74HC174AP
IC14	TC74HC174AP
IC15	TC74HC138AP
C1	ECQ-B1H103KFW
C2	ECQ-B1H103KFW
C3	RT-HE40TKYB101K-T
C4	LP5-50V103MS45
C5	RE3-50V470M-T2
C6	RT-HE40TKYB101K-T
C7	RE3-35V222M-T2
C8	RT-HE40TKYB101K-T
C9	ECQ-B1H332JFW
C10	RE3-25V221M-T2
C11	RE2-16V220M-T2
C12	ECQ-B1H103KFW
C13	RE3-50V101M-T2
C14	RE2-50V100M-T2
C15	RT-HE40TKYB101K-T
C16	RT-HE40TKYB101K-T
C17	ECQ-B1H103KFW
C18	ECQ-V1H-104-JZW
C19	ECQ-B1H103KFW
C20	RT-HE40TKYB101K-T
C21	RT-HE40TKYB101K-T
C22	RT-HE40TKYB101K-T
C23	RT-HE40TKYB101K-T
C24	RT-HE40TKYB101K-T
C25	ECQ-B1H103KFW
C26	RE2-50V1R0M-T2
C27	RT-HE40TKYB101K-T
C28	ECQ-B1H103KFW
C29	RT-HE50TKYB102K-T
C30	RT-HE40TKYB101K-T
C31	RT-HE40TKYB101K-T
C32	RT-HE40TKCH150J-T
C33	RT-HE40TKCH120J-T
C34	RE3-16V101M-T2
C35	ECQ-B1H103KFW
C36	ECQ-B1H103KFW
C37	RT-HE50TKYB102K-T
C38	RT-HE40TKYB101K-T
C39	RT-HE40TKYB101K-T
C40	RT-HE40TKYB101K-T
C41	ECQ-B1H103KFW
C42	ECQ-B1H103KFW
C43	RT-HE40TKYB101K-T
C44	RT-HE40TKYB101K-T
C45	RT-HE40TKYB101K-T
C46	RT-HE40TKYB101K-T
C47	RT-HE40TKYB101K-T
C48	RT-HE40TKYB101K-T
C49	ECQ-B1H103KFW
R1	CR-25-2KOHM-J-T
R2	CR-25-10KOHM-J-T
R3	CR-25-10KOHM-J-T
R4	R50XT-08J182
R5	CR-25-10KOHM-J-T
R6	CR-25-5.1KOHM-J-T
R7	CR-25-100OHM-J-T
R8	CR-25-4.7KOHM-J-T
R9	CRB25T29EFX3300
R10	CR-25-33KOHM-J-T
R11	

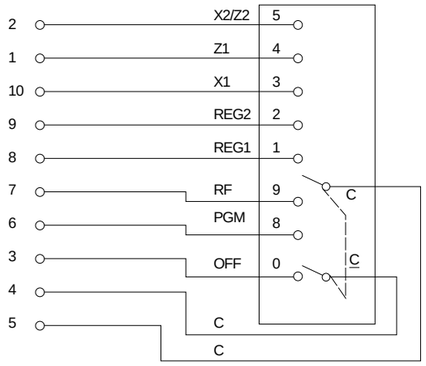
R12	CRB25T29EFX1500
R13	CR-25-56KOHM-J-T
R14	CR-25-56KOHM-J-T
R15	CR-25-56KOHM-J-T
R16	CR-25-56KOHM-J-T
R17	CR-25-56KOHM-J-T
R18	CR-25-100OHM-J-T
R19	CR-25-100OHM-J-T
R20	CR-25-100OHM-J-T
R21	CR-25-100OHM-J-T
R22	CR-25-100OHM-J-T
R23	CR-25-100OHM-J-T
R24	CR-25-100OHM-J-T
R25	CR-25-100OHM-J-T
R26	CR-25-1.8KOHM-J-T
R27	CR-25-10KOHM-J-T
R28	CR-25-4.7KOHM-J-T
R29	CR-25-1KOHM-J-T
R30	CR-25-56KOHM-J-T
R31	CR-25-56KOHM-J-T
R32	CR-25-56KOHM-J-T
R33	CRH100-FC10-J-1R0
R34	CR-25-10KOHM-J-T
R35	CR-25-4.7KOHM-J-T
R36	CR-25-4.7KOHM-J-T
R37	CR-25-10KOHM-J-T
R38	CR-25-10KOHM-J-T
R39	CR-25-56KOHM-J-T
R40	CR-25-4.7KOHM-J-T
R41	CR-25-100KOHM-J-T
R42	CR-25-1KOHM-J-T
R43	CR-25-56KOHM-J-T
R44	CR-25-100OHM-J-T
R45	CR-25-56KOHM-J-T
R46	CR-25-8.2KOHM-J-T
R47	CR-25-100KOHM-J-T
R48	CR-25-10KOHM-J-T
R49	CR-25-16KOHM-J-T
R50	CR-25-10KOHM-J-T
R51	CR-25-10KOHM-J-T
R52	CR-25-10KOHM-J-T
R53	CR-25-56KOHM-J-T
R54	CR-25-330KOHM-J-T
R55	CR-25-1.8KOHM-J-T
R56	CR-25-10KOHM-J-T
R57	CR-25-1.8KOHM-J-T
R58	CR-25-1.8KOHM-J-T
R59	CR-25-10KOHM-J-T
R60	CR-25-10KOHM-J-T
R61	CR-25-10KOHM-J-T
R62	CR-25-56KOHM-J-T
R63	CR-25-56KOHM-J-T
R64	CR-25-56KOHM-J-T
D1	1S2471 T-77-T
D2	1SR35-100A-T-32-T
D3	1SR35-100A-T-32-T
D4	1SR35-100A-T-32-T
D5	1SR35-100A-T-32-T
D6	1S2471 T-77-T
D7	1S2471 T-77-T
D8	1SR35-100A-T-32-T
D9	1S2471 T-77-T
D10	1S2471 T-77-T
D11	1S2471 T-77-T
D12	1S2471 T-77-T
D13	1SR35-100A-T-32-T
D14	1S2471 T-77-T
D15	RB100A-T32-T
D16	1SS83TD
D17	1SS83TD
D18	D1NL20-4070
D19	SB007-03SPA
D20	SB007-03SPA
D21	1S2471 T-77-T
D22	1S2471 T-77-T
D23	1S2471 T-77-T

D24	1S2471 T-77-T
D25	1S2471 T-77-T
D26	1S2471 T-77-T
D27	1S2471 T-77-T
D28	1S2471 T-77-T
D29	1S2471 T-77-T
D30	1S2471 T-77-T
D31	1S2471 T-77-T
D32	1SR35-100A-T-32-T
D33	1SR35-100A-T-32-T
D34	1SR35-100A-T-32-T
D35	1S2471 T-77-T
D36	1SR35-100A-T-32-T
D37	1SR35-100A-T-32-T
D38	1S2471 T-77-T
D39	1S2471 T-77-T
D40	1S2471 T-77-T
D41	1S2471 T-77-T
D42	1S2471 T-77-T
D43	1S2471 T-77-T
ZD1	RD18EB1-T1
ZD2	RD22EB1-T1
ZD3	RD68EB-T1
ZD4	RD27EB1-T1
ZD5	RD15EB3-T1
Q1	2SA1015GR.O.Y)TPE2
Q2	2SD721
Q3	2SC3303-Y
Q4	2SD2015
Q5	2SD2015
Q6	2SC945(K.P.Q.R)-T
Q7	2SD1853-AA
Q8	2SB926(T.U)-AA
Q9	2SB926(T.U)-AA
Q10	2SA1015GR.O.Y)TPE2
Q11	2SA1015GR.O.Y)TPE2
Q12	2SC945(K.P.Q.R)-T
Q13	2SD1853-AA
Q14	2SD1853-AA
Q15	DTA143ZS-TP
RA1	RGLD8X222J
RA2	RGLD8X563J
RA3	RGLD8X563J
CA1	CNB5X101K
CA2	CNB8X101K
CA3	CNB8X101K
CA4	CNB3X101K
CA5	CNB8X221K
CA6	CNB8X101K
CA7	CNB8X101K
X1	CST4.19MGW
X2	C-002RX(M90-76)
CN1	HBLB31-S2J
CN2	5277-02A
CN3	
CN4	53253-0310
CN5	53253-0310
CN6	IMSA-9604S-32C
CN7	IMSA-9604S-18C
CN8	
CN9	B3B-XH
CN10	IL-G-2P-S3T2-E
CN11	IL-G-3P-S3T2-E
CN12	IL-G-3P-S3T2-E
CN13	B2B-EH
CN14	IL-G-5P-S3T2-E
CN15	E412198*1
CN16	
CN17	
BZ1	PKM22EPP-2002

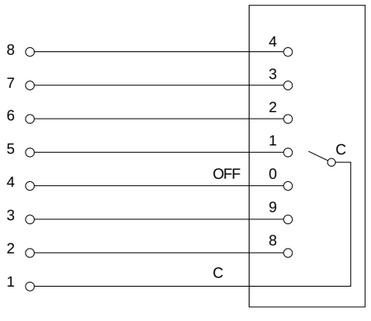
SW1	JPM1030-0201
	OSH-3040-SPL
T1	DCS-278
F1	UF-0033
F1	21801.6
F1	23702.5
F2	UL-TSCR-0.8A-N1

Board No.	Drawing No.
MAIN PCB E278-1 (3/3)	E240035

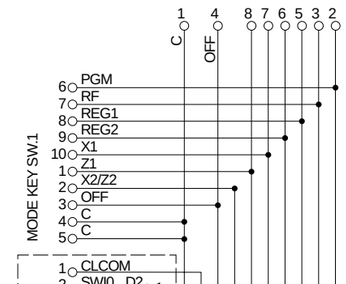
MODE KEY SW.1
KSL-B85FA02-B1J



MODE KEY SW.2
KSL-84FG01-B1J

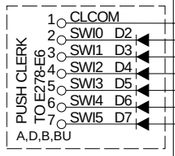


MODE KEY SW.2



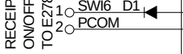
MODE KEY SW.1

PUSH CLERK
TO E278-E6

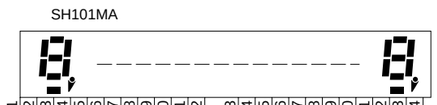


A,D,B,BU

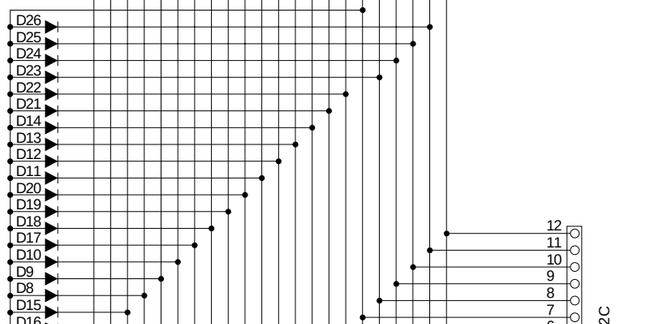
RECEIPT
ON/OFF
TO E278-E3

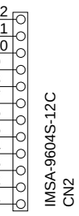


SH101MA

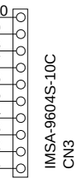


1S2471 T-77-T

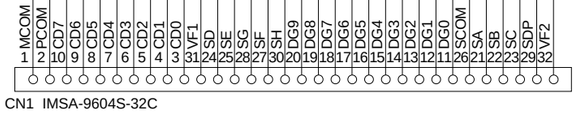




IMSA-9604S-12C
CN2

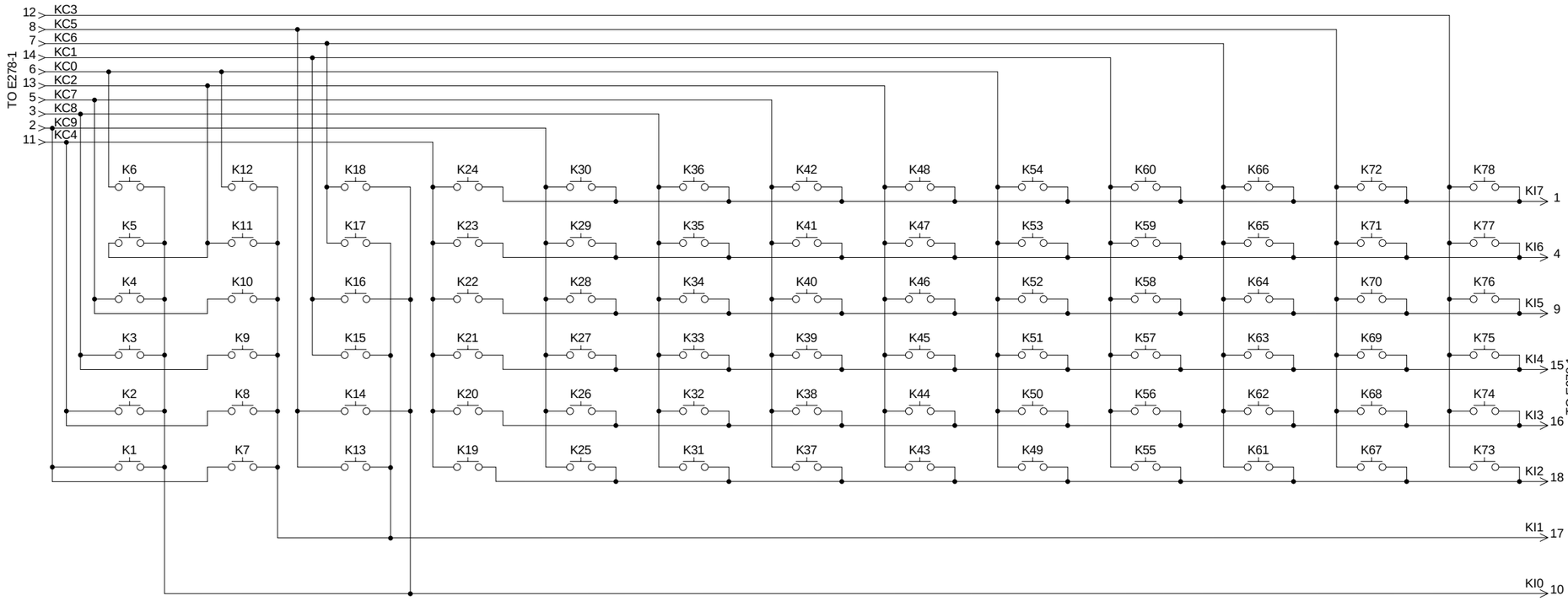


IMSA-9604S-10C
CN3



CN1 IMSA-9604S-32C

Board No.	Board No.
DISPLAY PCB E278-E2-1	E240036



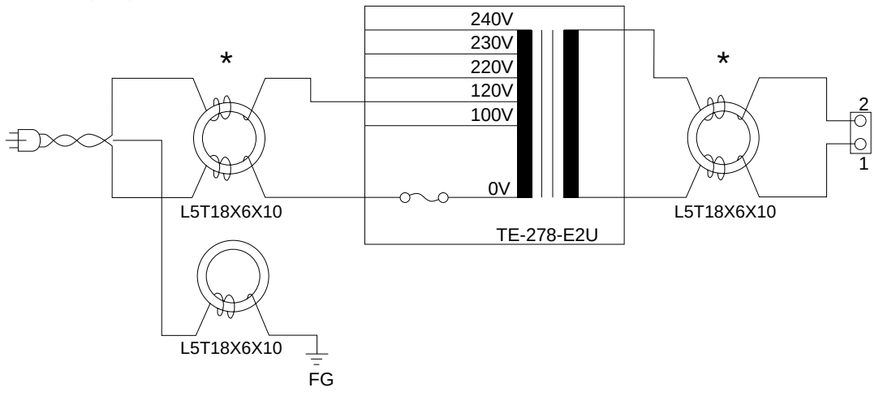
KEY CONTACT POSITION

6	12	18	24	30	36	42	48	54	60	66	72	78
5	11	17	23	29	35	41	47	53	59	65	71	77
4	10	16	22	28	34	40	46	52	58	64	70	76
3	9	15	21	27	33	39	45	51	57	63	69	75
2	8	14	20	26	32	38	44	50	56	62	68	74
1	7	13	19	25	31	37	43	49	55	61	67	73

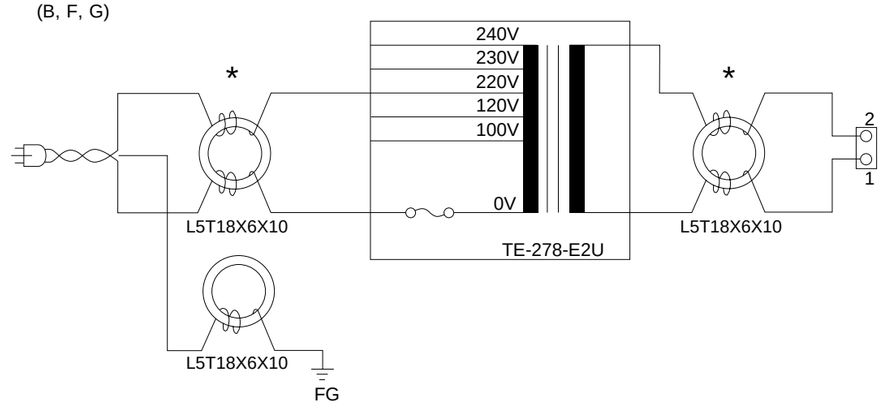
Board No.	Board No.
KEYBOARD E278-E4	E240037

〈 US. CANADA 〉
(C, L)

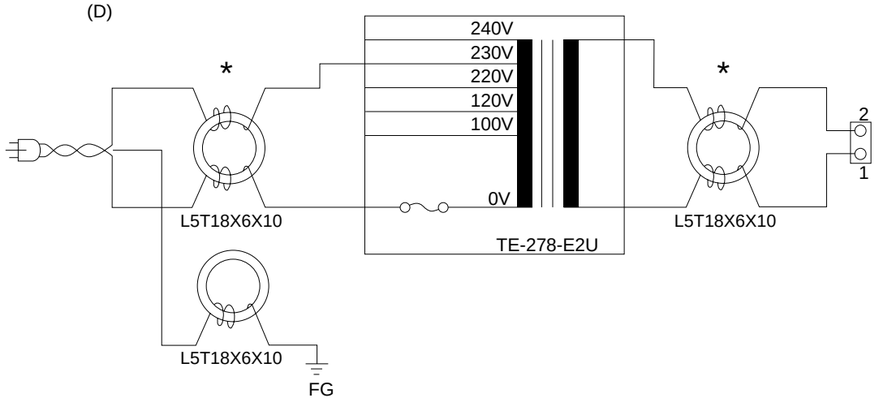
(US. CANADA SPEC.)



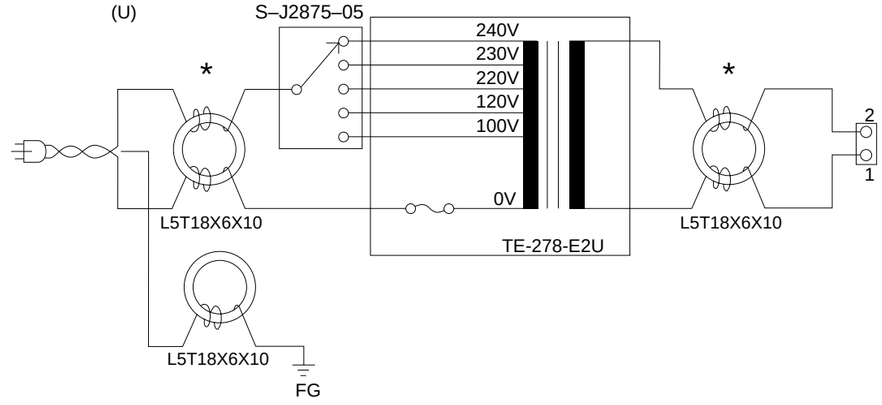
〈 EUROPE 〉
(B, F, G)



〈 U.K. 〉
(D)

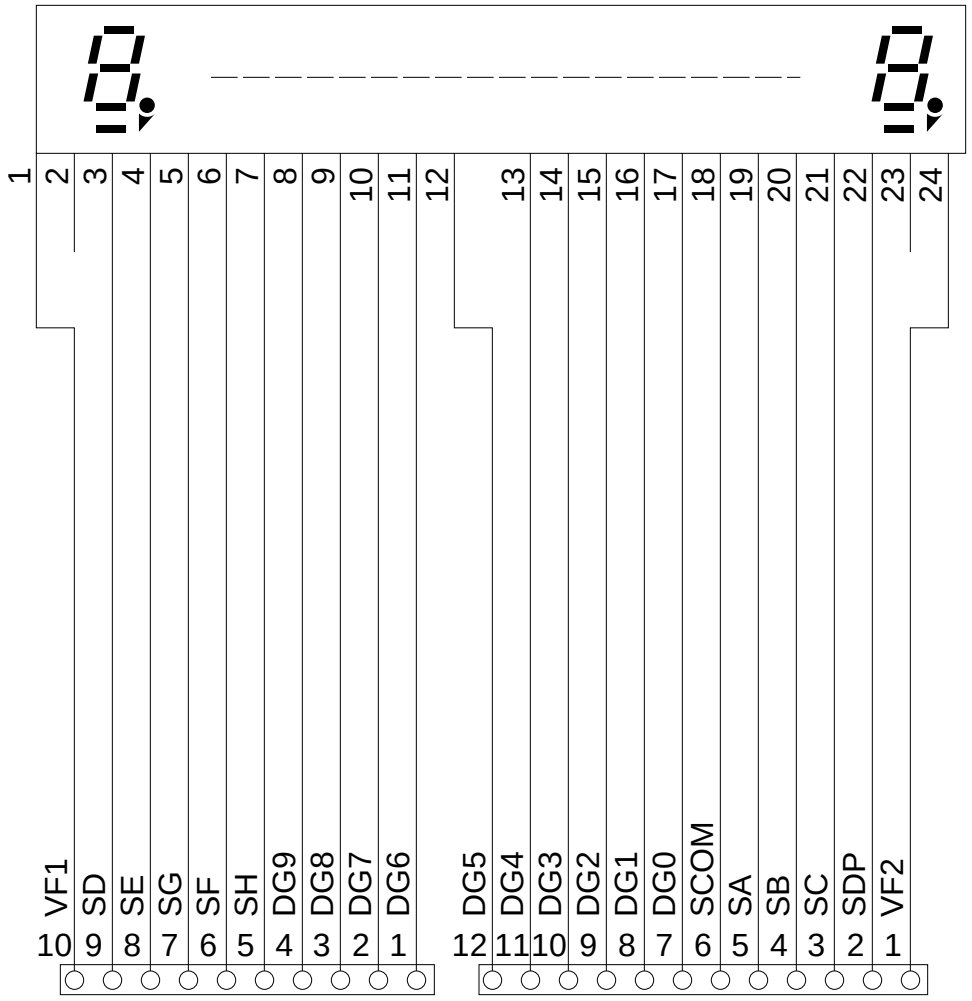


〈 〉 (LIMITED AREAS SPEC.)
(U) S–J2875–05



Board No.	Drawing No.
POWER SUPPLY	E340043

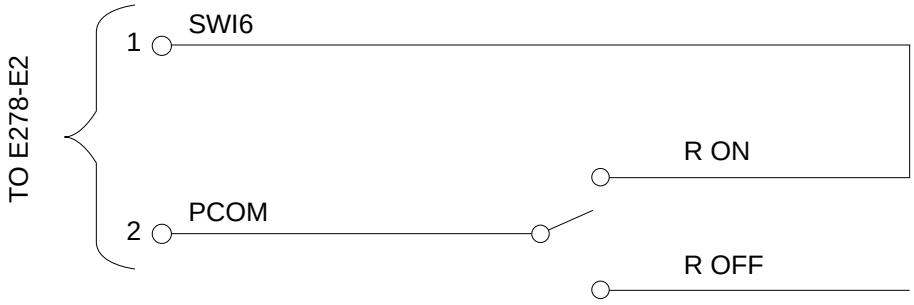
SH1019A



CN1 IMSA-9604S-10C

CN2 IMSA-9604S-12C

Board No.	Drawing No.
2ND DISPLAY E278-E2-2	E440039



Board No.	Drawing No.
SWITCH PCB	E440040

16. PARTS LIST

1. Main PCB ass'y
2. Button ass'y
3. E278-E2 ass'y, Display ass'y
4. 2nd Display ass'y
5. Upper case
6. Lower case
7. Printer unit
8. Drawer

    8-1. DL-2350 (Europe)
    8-2. DL-2351 (Canada)
    8-3. DL-2416 (U.S.A.)
    8-4. DL-2750 (Japan, Germany, Europe)
    8-5. DL-2751 (U.K.)
    8-6. DL-2752 (Germany)

Notes:

1. Price and specifications are subject to change without notice.
2. As for order / supply of spare parts, refer to the "GUIDE BOOK for spare parts supply" a separate publication.
3. Numbers in the item column correspond to the same numbers in exploded drawing.
4. MARKS:

    N: New parts

    Q: Quantity used per unit

    M: Minimum order/supply quantity

    R: Rank

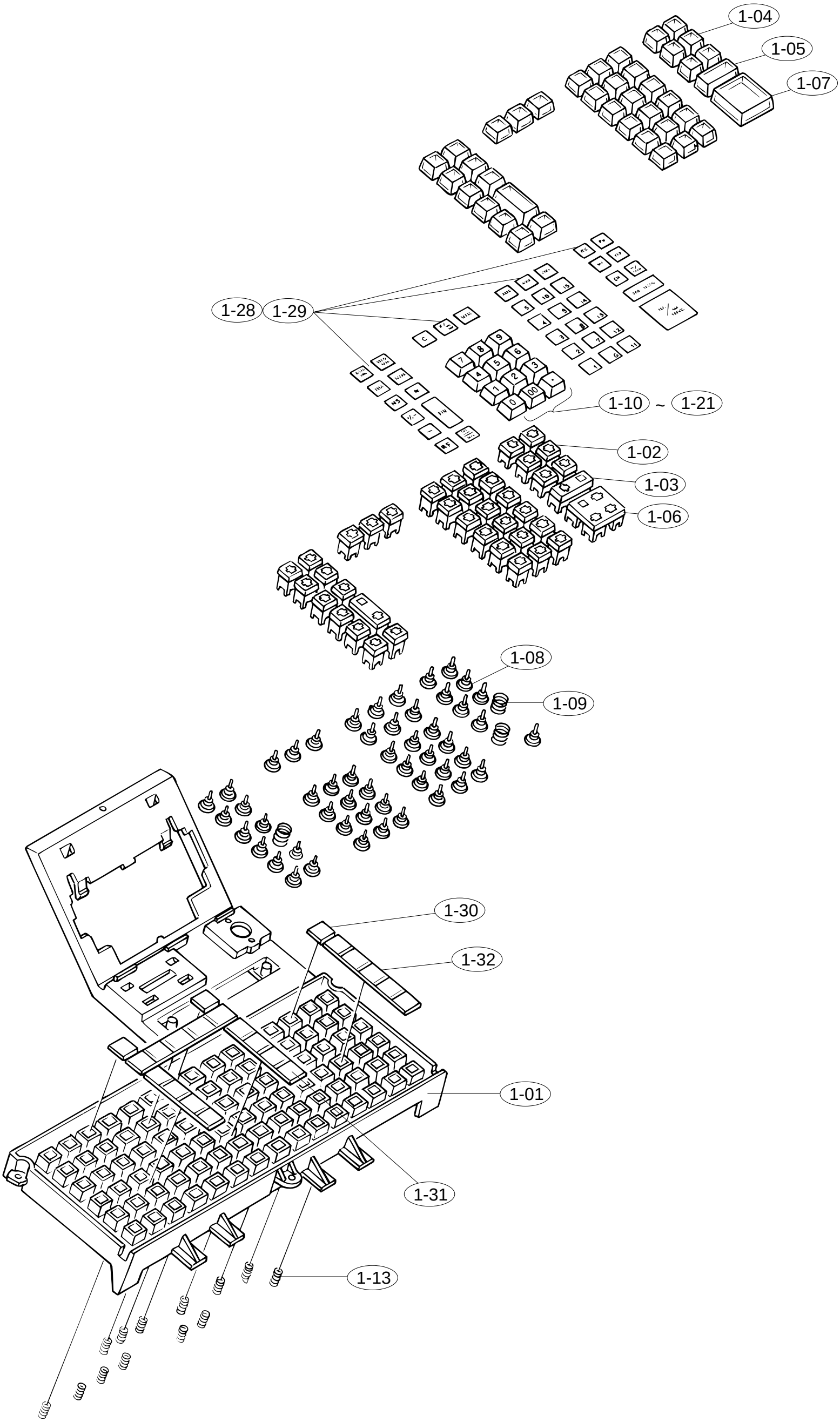
        A: Essential
        B: Stock recommended
        C: Less recommended
        X: No stock recommended

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
	1. Main PCB ass'y								
N		6192 5660	PCB E278-1 ass'y	E211715*4		1	1		B
	IC12	2006 0717	LSI	LC36256PLL10/12/15		1	1		A
N	IC11	2006 1109	EEPROM	BR93LC66A		1	1		A
N	IC06	2006 1130	LSI	UPD78044AGF080-3B9		1	1		A
	IC15	2101 0189	MOS IC	TC74HC138AP		1	1		A
	IC13,14	2105 1071	C-MOS IC	TC74HC174AP		2	1		A
N	IC07,08	2112 0035	MOS IC	TC74HC367AP		2	5		A
	IC10	2112 0042	Reset IC	S-80727AN-Z		1	50		A
N		6221 4694	1625-03R1 Connector	E32564-8(#24-400)	Germany	11	1		C
N	IC1	2112 0322	Triode regulator	UPC24M05HF		1	1		A
	IC9	2114 1512	Liner IC	BA10393		1	50		A
	IC02,03, 04,05	2114 2436	Monolithic IC	BA12003		4	1		A
	Q01,10, 11	2200 3672	Transistor	2SA1015GR,O,Y)TPE2		2	50		B
	Q08,09	2210 7186	Transistor	2SB926(T,U)-AA		2	1		B
	Q06,12	2220 2456	Transistor	2SC945(K,P,Q,R)-T		2	50		B
	Q03	2220 3487	Transistor	2SC3303-Y		1	1		B
	Q07,13	2230 4135	Transistor	2SD1853-AA		1	50		B
N	Q04,05	2250 1078	Transistor	2SD2015		2	1		B
N	Q02	2250 1113	Transistor	2SD721L		1	1		B
	D06,07, 09,10,11, 12,14,21, 22,23,24, 25,26,27, 28,29,30, 31,35	2301 0046	Diode	1S2471 T-77-T		16	50		C
	D02,03, 04,05,08, 13,32, 33,37	2301 0089	Diode	1SR35-100A-T-82-T		9	50		C
	D18	2301 3231	Diode	D1NL20-4070		1	50		C
	D19,20	2310 9410	Shot key barrier diode	SB007-03SPA		2	50		C
N	ZD05	2315 2710	Zener diode	RD15EB3-T1		1	50		C
N	ZD03	2315 2717	Zener diode	RD68EB-T1		1	50		C
N	ZD04	2315 2724	Zener diode	RD27EB1-T1		1	50		C
N	ZD02	2315 2794	Zener diode	RD22EB1-T1		1	50		C
N	D16,17	2315 2801	Diode	1SS83TD		2	50		C
	D15	2390 1323	Diode	RB100A-T32-T		1	50		C
	X2	2520 3445	Crystal oscillator	C-002RX(M90-76)		1	50		B
N	R41	2652 1140	Carbon film resistor	CR-25-100OHMJ-T		10	50		C
N	R29,42	2652 1168	Carbon film resistor	CR-25-1KOHMJ-T		2	50		C
N	R08,28, 35,36,40	2652 1210	Carbon film resistor	CR-25-4.7KOHMJ-T		5	50		C
N	R06	2652 1217	Carbon film resistor	CR-25-5.1KOHMJ-T		1	50		C
N	R46	6221 4826	Carbon film resistor	CR-25-8.2KOHMJ-T	U.S.A.,Canada, U.K.,Germany		50		C
N	R27,34, 37,38,48, 50,51,52, 56,59, 60,61	2652 1238	Carbon film resistor	CR-25-10KOHMJ-T	Europe, Other Countries	11	50		C

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
N	R13,14, 15,16,17, 30,31,32, 39,43,45, 53,62, 63,64	2652 1259	Carbon film resistor	CR-25-56KOHMJ-T		9	50		C
N	R07,18, 19,20,21, 22,23,24, 25,44,47	2652 1266	Carbon film resistor	CR-25-100KOHMJ-T		2	50		C
N	R54	2652 1273	Carbon film resistor	CR-25-330KOHMJ-T		1	50		C
	RA02,03	2652 1350	Module resistor	RGLD8X563J		2	50		C
N	R10	2652 1532	Carbon film resistor (P)	CR-25-33KOHM-J-T		1	50		C
N	R26,55, 57,58	2652 2001	Carbon film resistor	CR-25-1.8KOHM-J-T		2	50		C
N	R49	2652 2043	Carbon film resistor	CR-25-16KOHM-J-T		1	50		C
N	R09	2652 2099	Metal film resistor	CRB25T29EFX3300		1	50		C
N	R12	2652 2106	Metal film resistor	CRB25T29EFX1500		1	50		C
N	R04	2652 2113	Carbon film resistor	R50XT-08J182		1	50		C
N	RA01	2652 2120	Module resistor	RGLD8X222J		1	50		C
	X1	2801 8932	Ceramic oscillator	CST4.19MGW		1	1		C
	C13	2807 2273	Electrolytic capacitor	RE3-50V101M-T2		1	50		C
N	C26	2807 2693	Electrolytic capacitor	RE2-50V1ROM-T2		1	50		C
N	C07	2807 2700	Electrolytic capacitor	RE3-35V222M-T2		1	5		C
N	C34	2807 2707	Electrolytic capacitor	RE3-16V101M-T2		1	50		C
N	C11	2807 2714	Electrolytic capacitor	RE2-16V220M-T2		1	50		C
N	C10	2807 2721	Electrolytic capacitor	RE3-25V221M-T2		1	50		C
N	C04	2807 2742	Electrolytic capacitor	LP5-50V103MS45		1	1		C
N	C09	2807 2749	TF capacitor	ECQ-B1H332JFW		1	50		C
	C29,37	2818 0365	Ceramic capacitor	RT-HE50TKYB102K-T		2	50		C
	C03,06, 08,15,16, 20,21,23, 24,27,30, 31,38,39, 40,43,44, 45,46,47, 48,49	2818 0446	Ceramic capacitor	RT-HE40TKYB101K-T		17	50		C
	C32	2818 3224	Ceramic capacitor	RT-HE40TKCH150J-T		1	50		C
	C33	2818 3291	Ceramic capacitor	RT-HE40TKCH120J-T		1	50		C
	CA01	2819 5460	Module capacitor	CNB5X101K		1	50		C
N	CA04	2819 5524	Module capacitor	CNB3X101K		1	50		C
	C18	2820 3233	TF capacitor	ECQ-V1H-104-JZW		1	50		C
	C01,02, 12,17,19, 25,28,35, 36,41,42	2820 3713	TF capacitor	ECQ-B1H103KFW		8	50		C
	CA05	2845 0049	Module capacitor	CNB8X221K		1	5		C
	CA02,03, 06,07	2845 0168	Module capacitor	CNB8X101K		4	5		C
N		3000 6804	Heat sink	OSH-3040-SPL		1	1		C
N	SW01	3000 7189	MT switch	JPM1030-0201		1	5		C
N	T01	3000 7203	DC-DC converter	DCS-278		1	1		A

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
N	F01	3000 7315	Fuse	23702.5	U.S.A.,Canada, Other countries	1	5		B
	F01	3000 7322	Fuse	21801.6	Europe,U.K., Germany	1	50		B
	BZ01	3122 1589	Piezo electric sounducer	PKM22EPP-2002		1	1		C
	CN11	3500 3355	Pin ass'y 3P	IL-G-3P-S3T2-E		1	50		C
	CN10	3500 3371	Connector 2P	IL-G-2P-S3T2-E		1	50		C
N	CN04,05	3500 7122	Pin ass'y	53253-0310		2	50		C
	CN02	3501 9233	Connector	5227-02A		1	50		C
N	CN01	3510 7550	PCB connector	HBLB31S-2J		1	50		C
N	CN06	3540 4808	PCB connector	IMSA-9604S-32C		1	50		C
	CN07	3540 4815	PCB connector	IMSA-9604S-18C		1	50		C
	F02	3631 0325	Fuse	UL-TSCR-0.8A-N1		1	10		B
N	F01	3640 2331	Fuse holder	UF-0033		2	50		X
N		4308 1046	PCB-E278-2	E211714-1		1	1		C
N		5041 5121	Screw	3X12 ZMC-3		1	50		C
N	C14	6221 4806	Electrolytic capacitor	RE2-50V100M-T2		1	50		C
N	CN15	6246 4220	Connector sub ass'y	E412198*1		0	1		C
N		6192 5660	PCB E278-1 ass'y	E211715*4		0	1		B
N		6246 6291	Connector sub ass'y	E412198A*1		1	1		C

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		2. Button ass'y							
N		6192 5480	Button ass'y	E211700*1	Except U.S.A. & Canada	1	1		C
N		6192 5490	Button ass'y	E211700*2	U.S.A., Canada	1	1		C
	1-22	5112 0124	Screw P tight	3X8 ZMC-3		6	50		C
	1-09	6221 0630	Button spring A	E411104-1		3	50		B
	1-23	6221 0648	Button spring B	E411104-2		13	50		B
	1-05	6221 3988	L cap E227	E210964-1	Except U.S.A. & Canada	2	50		B
	1-04	6221 4025	S cap E227	E311103-1	Except U.S.A. & Canada	37	50		B
	1-04	6221 4025	S cap E227	E311103-1	U.S.A., Canada	54	50		B
	1-03	6221 4344	L button E240	E210963-3	Except U.S.A. & Canada	2	50		B
	1-07	6221 4346	LLL cap E240	E211131-1		1	50		B
	1-02	6221 4355	S button E240	E311101-3	Except U.S.A. & Canada	49	50		B
	1-02	6221 4355	S button E240	E311101-3	U.S.A., Canada	66	50		B
	1-21	6221 4356	No.5 button	E311116-3		1	50		B
	1-31	6221 4357	Button filler 4SE240	E311265-1		2	5		B
	1-32	6221 4358	Button filler 5SE240	E311265-2	Except U.S.A. & Canada	2	50		B
	1-10	6221 4360	S button E240-1	E311279-1		1	50		B
	1-11	6221 4361	S button E240-2	E311279-2		1	50		B
	1-12	6221 4362	S button E240-3	E311279-3		1	50		B
	1-13	6221 4363	S button E240-4	E311279-4		1	50		B
	1-14	6221 4364	S button E240-6	E311279-5		1	50		B
	1-15	6221 4365	S button E240-7	E311279-6		1	50		B
	1-16	6221 4366	S button E240-8	E311279-7		1	50		B
	1-17	6221 4367	S button E240-9	E311279-8		1	50		B
	1-18	6221 4368	S button E240-0	E311279-9		1	50		B
	1-19	6221 4369	S button E240-.	E311279-10		1	50		B
	1-20	6221 4370	S button E240-00	E311279-11		1	50		B
		6245 3530	Key contact rubber E240	E411877-1	Except U.S.A. & Canada	52	50		B
	1-08	6245 3530	Key contact rubber E240	E411877-1	U.S.A., Canada	67	50		B
	1-06	6245 3750	LLL button E240	E211132A-1		1	50		B
N	1-30	6246 2000	Button filler S E278	E412129-2	Except U.S.A. & Canada	3	5		B
N	1-01	6246 3140	Button flame	E110218B-1		1	1		B
N	1-25	6246 3410	Common sheet E278	E311938-1		1	1		B
N	1-26	6246 3420	Spacer E278	E311939-1		1	50		B
N	1-27	6246 3430	KB chassis E278	E311940-1		1	1		X

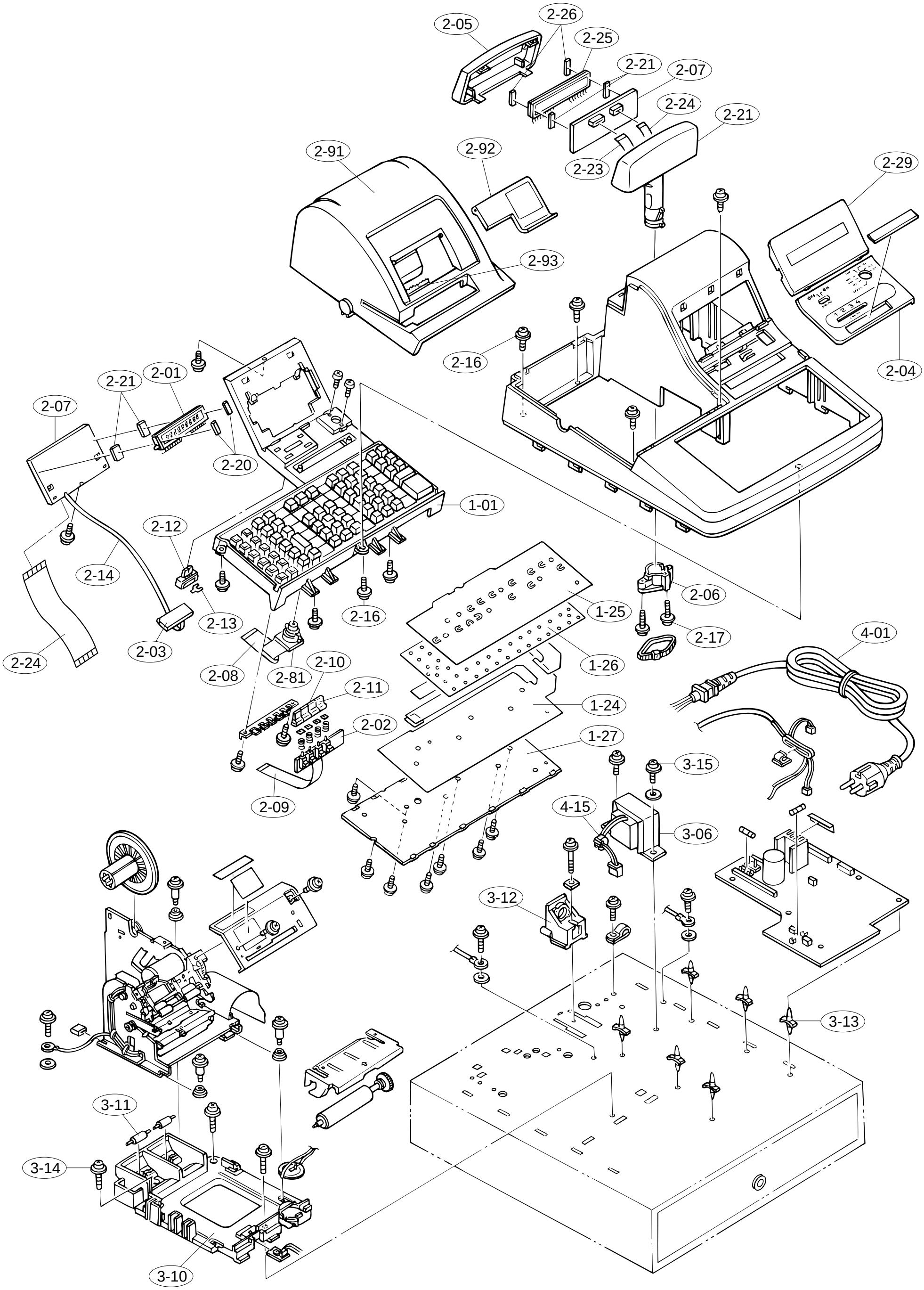

1-04
1-05
1-07
1-28
1-29
1-10 ~ 1-21
1-02
1-03
1-06
1-08
1-09
1-30
1-32
1-01
1-31
1-13

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		3. E278-E2 ass'y, Display ass'y							
		6192 6790	PCB E278-E2 ass'y	E240029*2	U.S.A., Canada	1	1		A
	D01,02, 03,04,05, 06,07,08, 09,10,11, 12,13,14, 15,16,17, 18,19,20, 21,22,23, 24,25,26	2301 0046	Diode	1S2471 T-77-T	Except U.S.A. & Canada	20	50		C
	D01,02, 03,04,05, 06,07,08, 09,10,11, 12,13,14, 15,16,17, 18,19,20, 21,22,23, 24,25,26	2301 0046	Diode	1S2471 T-77-T	U.S.A. & Canada	24	50		C
N	2-01	2408 8226	Display tube	SH101MA		1	1		A
N	2-02	3410 4128	Push switch	JPA0410-3701	U.S.A., Canada	1	1		B
N		3540 4808	Connector 32C	IMSA-9604S-32C		1	1		C
N		3540 4822	Connector 10C	IMSA-9604S-10C		1	50		C
N		3540 4829	Connector 12C	IMSA-9604S-12C		1	5		C
	2-03	4306 1013	PCB E241-E3-2	E311071A-1		1	50		C
N	2-07	4308 1088	PCB E278-E2	E240025-1		1	1		C
N	2-08	6246 4230	PC joiner A-E278	E412176-1		1	1		C
N	2-09	6246 4240	PC joiner B-E278	E412176-2		1	1		C
N	2-14	6246 4250	PC joiner C-E278	E412176-3		1	50		C
N	2-20	6246 4260	Restrain A-E278	E412177-1		2	50		C
N	2-21	6246 4270	Display spacer E278	E412178-1		4	50		C
N	2-22	6246 4280	FFC joiner A-E278	E412175-1		1	1		C
N	2-23	6246 4290	FFC joiner B-E278	E412175-2		1	1		C
N	2-24	6246 4300	FFC joiner C-E278	E412175-3		1	1		C

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		4. 2nd Display ass'y							
	2-25	2408 8233	Display tube	SH1019A		1	1		A
N	2-26	6246 4310	Restrain B-E278	E412177-2		2	50		C
N		3540 4822	Connector 10C	IMSA-9604S-10C		1	50		C
N		3540 4829	Connector 12C	IMSA-9604S-12C		1	50		C

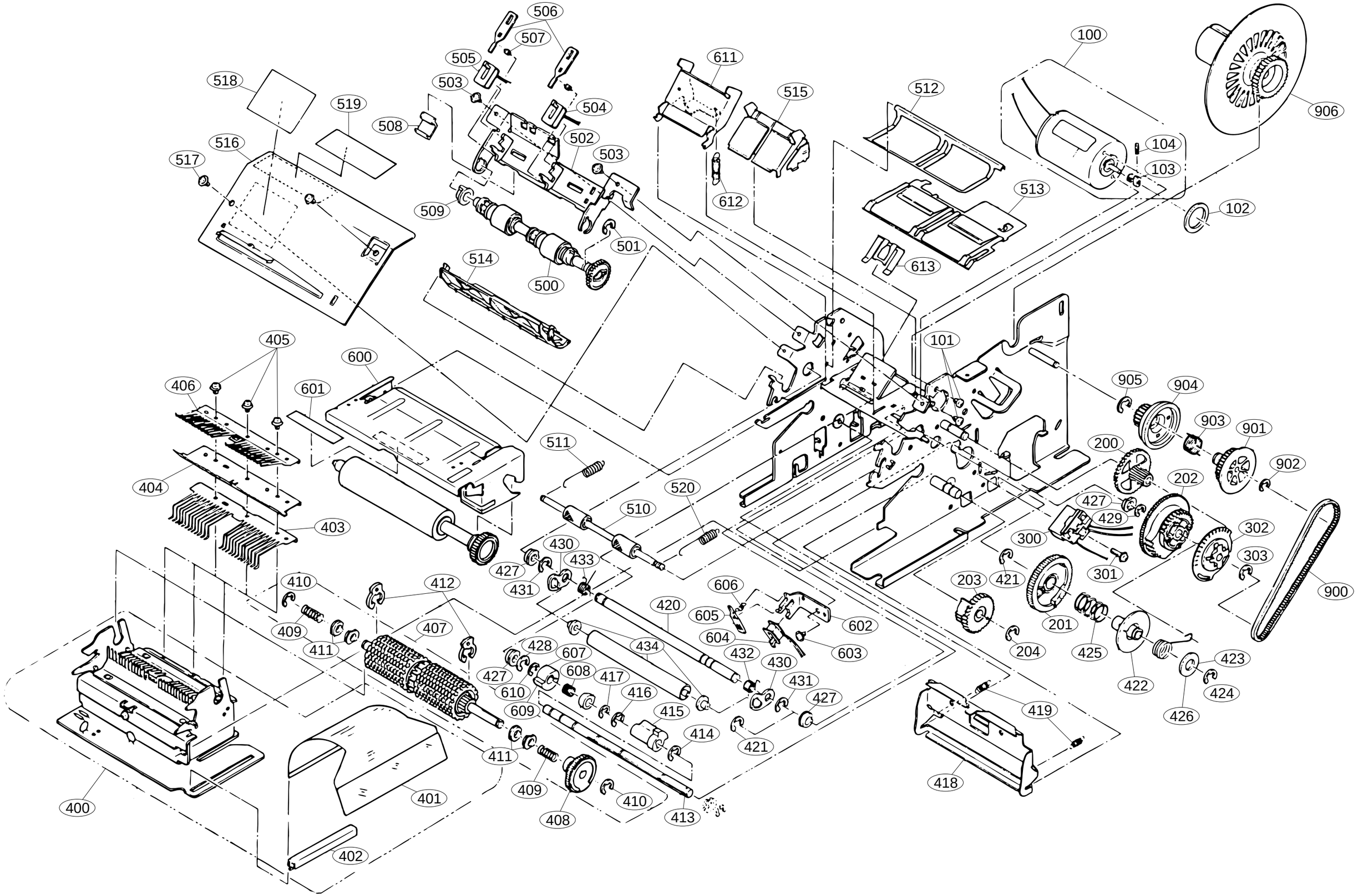
N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		5. Upper case							
N		6192 5530	Printer cover ass'y	E311982*1		1	1		B
N	2-91	6246 3450	Printer cover	E110372-1		1	1		C
N	2-92	6246 3460	Journal cover	E311961-1		1	5		C
N	2-93	6246 4330	Paper cutter	E412225-1		1	5		B
		3840 1408	Fasten tab	2531-2		1	50		C
	2-17	5111 2714	Screw P tight	3X20 ZMC-3..		2	50		C
	2-16	5112 0124	Screw P tight	3X8 ZMC-3.....		6	50		C
N		5150 1632	Tapping screw	2.6X6 ZMC-3		2	50		C
N		5500 0815	Flat clip	A-2N		1	50		C
N		5900 3031	Wire band	T-30L		1	50		C
	2-13	6029 0326	Contact spring	A4897C-1		1	50		C
N		6192 5480	Button unit	E211700*1	Except U.S.A. & Canada	1	1		B
N		6192 5490	Button unit	E211700*2	U.S.A. & Canada	1	1		B
N		6192 5540	2nd display ass'y	E311983*1		1	1		B
	2-06	6220 2505	2nd display bush	E310377-1		1	5		C
	2-11	6221 4140	Push button BE570	E411462-1	Except U.S.A. & Canada	2	50		B
	2-10	6221 4141	Push button AE570	E411463-1	Except U.S.A. & Canada	2	50		B
	2-12	6221 4758	Slide knob	E311468-1		1	50		C
N	2-29	6246 3310	Display case	E210952A-8	U.S.A. & Canada	1	1		C
N	2-29	6246 3320	Display case	E210952-9	Others	1	1		C
N		6246 3370	Upper case	E110216-8	Others	1	1		X
N		6246 3650	Upper case	E110216-9	Germany	1	1		X
N		6246 3470	E278-E2-2 ass'y	E311995*1		1	1		B
N	2-04	6246 3670	Mode cover C-E278	E210953-8	U.S.A. & Canada	1	1		C
	2-04	6246 3380	Mode cover B-E279	E210953-7	Others	1	1		C
	2-21	6221 3796	2nd display case	E210920-1		1	1		X
		3418 1527	Key set	4K-BIJ 401	U.K., U.S.A. & Canada	1	1		C
		3418 1519	Key set	3K-BIJ 301	Others	1	1		C
	2-81	3410 1787	Mode key	KSL-B86FA02-B1J		1	1		B
	2-05	6246 3230	Rear 2nd display case	E210921B-8	U.S.A. & Canada	1	1		C
	2-05	6246 8265	Rear 3rd display case	E210921B-9	Others	1	1		C

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		6. Lower case							
		6-1-1. Power supply ass'y (except Germany)							
N	3-06	3000 7210	Power transformer	TE-278-E2U		1	1		C
	4-15	3030 4055	Ferrite core	L5T18X6X10		2	50		X
N		3680 1140	Terminal cap	2.4DUL	Europe,U.S.A., Canada,U.K.	4	50		C
		5530 0526	Connection cap	CE2		2	50		C
		5560 0368	Wire band	T-18S		1	50		C
	4-01	6221 4802	Power cord	M2511	Europe	1	1		C
	4-01	3700 4281	Power cord	PS204	U.S.A., Canada	1	1		C
N	4-01	3701 0242	Power cord	MP5004	U.K.	0	50		C
		3600 1046	Voltage selector	S-J2875-05	Europe	1	1		C
		6-1-2. Upper drawer ass'y (except Germany)							
	3-12	6221 3886	V/B connector plate	E311094-1		1	5		C
	3-11	6221 4762	R/P roller	E411696-1		2	50		C
N		6236 6231	FG line ass'y	E310997B-3		1	50		C
N	3-10	6246 3530	Printer fixing plate	E110374-1		1	1		C
	3-13	5550 1432	Locking spacer	SPLS-3		13	50		C
N		6246 4320	Transformer fixing plate	E412179-1		1	1		C
		6-2-1. Power supply ass'y (Germany)							
N		3000 7210	Power transformer	TE-278-E2U		1	1		C
		3030 4055	Ferrite core	L5T18X6X10		2	50		X
N		3680 1140	Terminal cap	2.4DUL	Europe,U.S.A., Canada,U.K.	4	50		C
		5530 0526	Connection cap	CE2		2	50		C
		5560 0368	Wire band	T-18S		1	50		C
		6221 4802	Power cord	M2511	Europe	1	1		C
		6-2-2. Lower case ass'y (Germany)							
	3-12	6221 3886	V/B connector plate	E311094-1		1	5		C
N		6221 4404	Lower case E425	E110241-1		1	1		X
N		6221 4424	Lower chassis E425	E311244-1		1	1		X
		6221 4430	Clerk fixing plate E425	E411505-1		1	5		C
		6221 4438	Clerk sub plate A-E425	E411529-1		1	50		C
	3-11	6221 4762	R/P roller	E411696-1		2	50		C
N		6236 6231	FG line ass'y (B)	E310997B-3		1	50		C
N	3-10	6246 3530	Printer fixing plate E278	E110374-1		1	1		C
N		6246 4320	Transformer fixing plate	E412179-1		1	1		C
N		6246 6298	FG line ass'y (E)	E311000B-6		1	1		C
	3-15	5112 0035	Screw P tight	4X6 ZMC-3		3	50		C
	3-14	5112 0043	Screw P tight	3X8 ZMC-3		6	50		C
		5112 0132	Screw P tight	3X10 ZMC-3...		4	50		C
N		5150 0971	Square nut	M3 ZMC-3		1	50		C
N		5150 1628	Screw	4X10 ZMC-3....		4	50		C
N		5150 1631	Washer	6.6X17X1.2 ZMC-3		1	50		C
N		5150 1633	Screw P tight	3X35 ZMC-3		1	50		C
N		5550 2013	Wire clamp	S-506		1	50		C
		5900 0419	Washer	4		2	50		C
N		6191 0195	Key clerk ass'y	E411764*1		1	1		C
		6-3. Drawer ass'y							
N		6246 3480	Drawer (DL-2350)	E412161*3	Europe	1	1		X
N		6246 3490	Drawer (DL-2416)	E412161*4	U.S.A.	1	1		X
N		6246 3500	Drawer (DL-2351)	E412161*5	Canada	1	1		X
N		6246 3510	Drawer (DL-2750)	E412161*6	Japan,Germany, Europe	1	1		X
N		6246 3520	Drawer (DL-2751)	E412161*7	U.K.	1	1		X


2-05
2-26
2-25
2-21
2-07
2-24
2-21
2-23
2-91
2-92
2-29
2-93
2-16
2-04
2-21
2-01
2-07
2-20
1-01
2-12
2-14
2-13
2-16
2-06
1-25
2-17
2-24
2-03
2-08
2-81
2-10
2-11
1-26
4-01
1-24
2-02
1-27
3-15
2-09
4-15
3-06
3-12
3-13
3-11
3-14
3-10

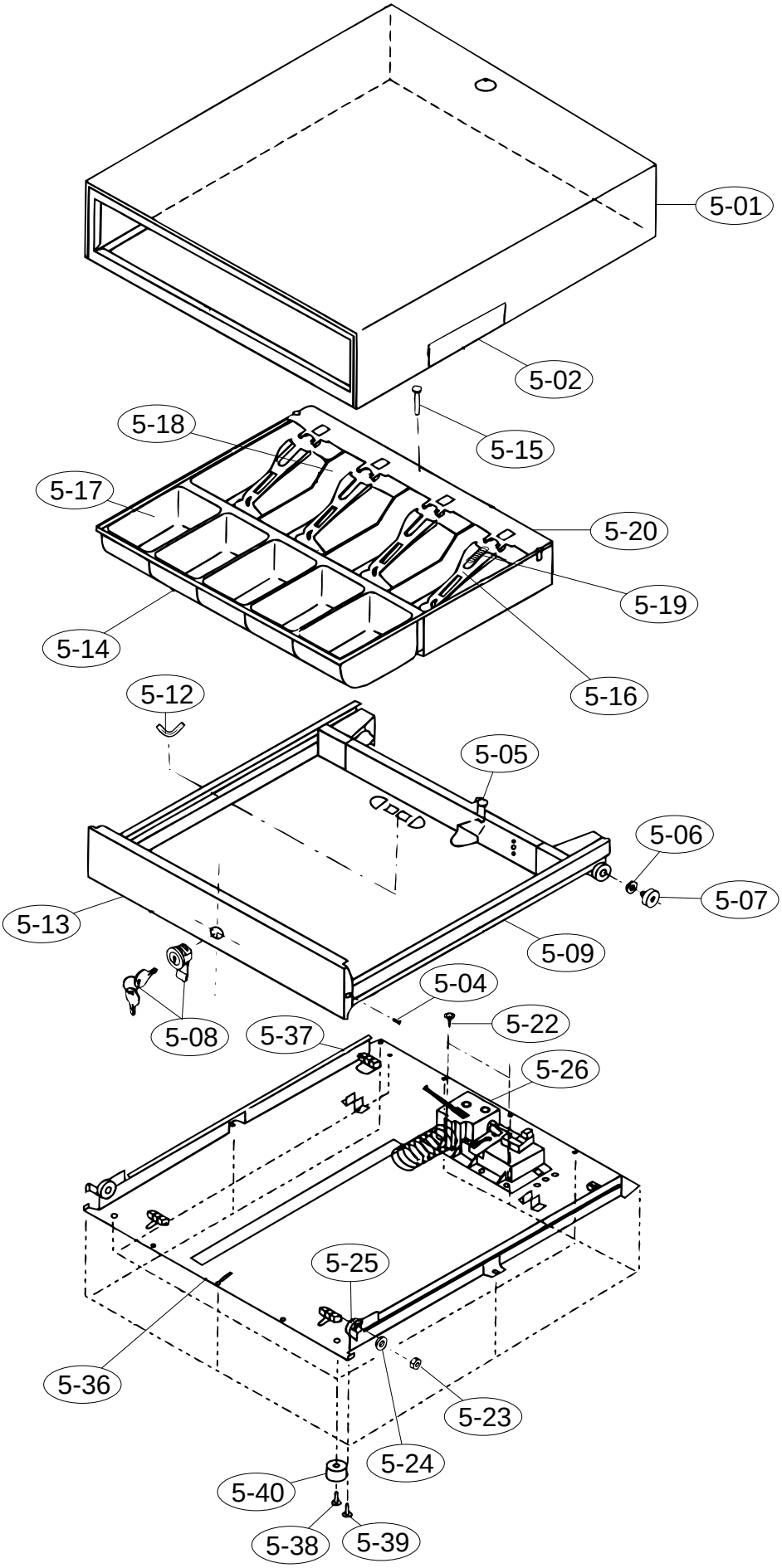
N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		7. Printer Unit (CR-812A)							
		1000 7593	Digital printer	CR-812A-009-15-002A		1	1		A
		7-1. Motor							
	100	1907 6978	Motor ass'y	F715051000		1	1		A
	101	1903 0632	C.B.screw M3x4	B010350111		2	50		X
	102	1907 6979	Motor spacer	F715052010		1	50		C
	103	1903 0166	Motor gear	F701007020		1	5		C
	104	1903 0775	Spring pin	B130100816 1.2X6		10	50		C
		7-2. Transmission mechanism components							
	200	1903 0119	Reduction gear	F701101010		1	1		B
	201	1903 0162	Print transmission gear	F703209010		1	1		B
	202	1903 0160	Geneva gear	F703101010		1	1		B
	203	1903 0120	Print transmission gear	F701101020		1	1		B
	204	1903 0715	Retaining ring	B150300711		1	50		C
		7-3. Detecting mechanism components							
	300	1906 4041	Timing detector ass'y B	F703151000		1	1		B
	301	1906 4042	Cup screw	B1009008		1	50		X
	302	1903 0085	Timing detector plate	F705151010		1	1		C
	303	1903 0715	Retaining ring	B150300711		1	50		C
		7-4. Printing mechanism components							
	400	1903 0086	Trigger magnet unit A	F705201000		1	1		A
	401	1903 1045	F.P.C.	C702214010		1	1		C
	402	1903 1044	F.P.C. holder	C702206020		1	1		B
	403	1903 0087	Trigger spring	F705207010		1	1		C
	404	1903 0072	Detect plate	F701223021		1	1		C
	405	1903 0643	Cup screw	B040302311		3	50		X
	406	1903 0128	Detect spring	F701223080		1	1		C
	407	1907 6990	Print wheel ass'y	M712009131(Japan)		1	1		B
	407	1907 6991	Print wheel ass'y	M712009132 (Export 2digit)		1	1		B
	407	1908 6990	Print wheel ass'y	M712009132 (Export 3digit)		1	1		B
	408	1903 0123	Print wheel gear	F701220012		1	1		C
	409	1903 0124	Stopper spring	F701220060		2	50		X
	410	1902 1699	Retaining ring	B150300811		2	50		X
	411	1902 1569	Print wheel shaft holder	B230250230		4	1		C
	412	1903 0126	Shaft holder stopper	F701223040		2	1		C
	413	1903 0088	Clamp shaft	F705210010		1	1		C
	414	1902 1699	Retaining ring type-e(5)	B150300811		1	50		C
	415	1903 0112	Clamp cam	F701005020		1	5		C
	416	1902 1699	Retaining ring TYPE-E(4)	B150300711		1	50		C
	417	1903 0715	Retaining ring TYPE-E(6)	B150300812		1	50		C
	418	1903 0114	Clamp plate ass'y	F701006000		1	1		X
	419	1903 0105	Clamp spring	F701001070		2	50		C
	420	1903 0129	Crank shaft	F701225010		1	1		X
	421	1902 1699	Retaining ring TYPE-E(5)	B150300811		2	50		C
	422	1903 0130	Print cam	F701225020		1	1		C
	423	1903 0766	Plain washer 8X1.6X18	B100161011		1	50		C
	424	1902 1699	Retaining ring TYPE-E(5)	B150300811		1	50		C
	425	1903 0131	Print cam holding spring	F701225030		1	50		B
	426	1903 0132	Crank shaft resetting spring	F701225050		1	5		B
	427	1903 0133	Crank shaft holder	F701225060		4	50		C
	428	1902 1699	Retaining ring TYPE-E(4)	B150300811		1	50		C
	429	1903 0715	Retaining ring TYPE-E(6)	B150300711		1	50		C

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
	430	1903 0314	Platen holder	F701225070		2	5		C
	431	1902 1699	Retaining ring TYPE-E(5)	B150300811		2	50		C
	432	1903 0135	Platen spring	F701225080		1	5		B
	433	1903 0136	Platen spring (R side)	F701225090		1	5		B
	434	1903 0082	Platen ass'y	F703241000		1	1		C
			7-5. Paper feeding mechanism components						
	500	1908 5568	Paper feeding roller ass'y(A)	F714252000*		1	1		B
	501	1902 1699	Retaining ring TYPE-E(5)	B150300811		1	50		C
	502	1903 0091	Paper feeding trigger York ass'y	F705254000		1	1		C
	503	1902 1555	Cup screw M3X4	B040302311		2	50		X
	504		Paper feeding coil (R side)	F703262010		1	1		B
	505	1903 0168	Paper feeding coil (J side)	F703262020		2	1		C
	506	1903 0169	Paper feeding trigger lever	F703251050		2	5		C
	507	1903 0139	Paper feeding spring	F701251080		2	50		B
	508	1903 0083	Print roller damper	F703251060		1	5		C
	509	1903 0140	Paper feeding shaft holder	F701252020		1	50		C
	510	1907 6980	Paper holding roller ass'y	F715251000		1	1		B
	511	1907 6981	Paper holding spring R	F715252010		1	50		B
	512	1903 0151	Paper guide(Platen side)	F701261010		1	1		B
	513	1903 0152	Paper guide (Print wheel side)	F701261020		1	1		B
	514	1903 0081	Paper guide ass'y	F701008000		1	1		B
	515	1903 0185	Paper entrance guide	F705003010		1	1		B
	516	1907 6982	Print cover	F715551010		1	1		X
	517	1902 1555	Cup screw M3X4	B040302311		2	50		X
	518	1903 0184	Roll paper set seal	F705552010		1	5		X
	519	1907 6983	Roll paper set seal B	F715552010		1	5		X
	520	1907 6984	Paper holding spring J	F715252020		1	50		C
			7-6. Inking, card, stamp, mechanism components						
	600	1903 0183	Ink roller holder ass'y	F705351000		1	1		C
	601	1903 0153	Ink roll seal	F701353010		1	5		X
	602	1903 0178	Stamp trigger York	F703451010		1	1		C
	603	1902 1555	Cup screw M3 X 4	B040302311		1	50		X
	604		Stamp trigger coil	F703452020		1	1		B
	605	1903 0169	Paper feeding trigger spring	F703251050		1	5		C
	606	1903 0139	Paper feeding clutch lever	F701251080		1	50		B
	607	1903 0164	Paper feeding trigger lever	F703210020		1	5		B
	608	1903 0147	Stamp ratchet wheel	F701254011		1	50		C
	609	1903 0113	Stamp cam	F701005030		1	5		C
	610	1903 0715	Retaining ring TYPE-E(4)	B150300711		1	50		X
	611	1903 0092	Stamp lever	F705451010		1	1		C
	612	1903 0156	Stamp lever spring	F701453020		1	50		B
	613	1903 0154	Stamp case spring	F70142030		1	1		C
			7-7. Paper take up mechanism components						
	900	1907 5884	Paper rolling belt	F701009030		1	1		C
	901	1903 0110	Paper rolling pulley	F701004020		1	1		B
	902	1903 0787	Retaining ring TYPE-E(3)	B150300611		1	50		X
	903	1903 0111	Paper rolling spring	F701004030		1	5		B
	904	1903 0109	Paper rolling gear	F701004010		1	1		B
	905	1903 0789	Retaining ring TYPE-E(6)	B150300911		1	50		X
	906	1903 0177	Paper rolling shaft	F703301010		1	1		C


506
507
505
503
518
519
508
504
502
503
516
517
509
501
514
500
611
515
612
512
100
906
104
103
513
102
613
405
600
101
406
601
905
904
903
901
902
200
202
427
429
302
303
300
301
203
421
201
204
425
422
423
424
426
900
511
520
510
430
433
427
431
606
605
604
602
603
420
434
432
430
431
427
421
428
607
608
417
416
415
414
427
610
609
411
409
408
410
413
419
418
404
403
410
412
409
411
407
400
401
402

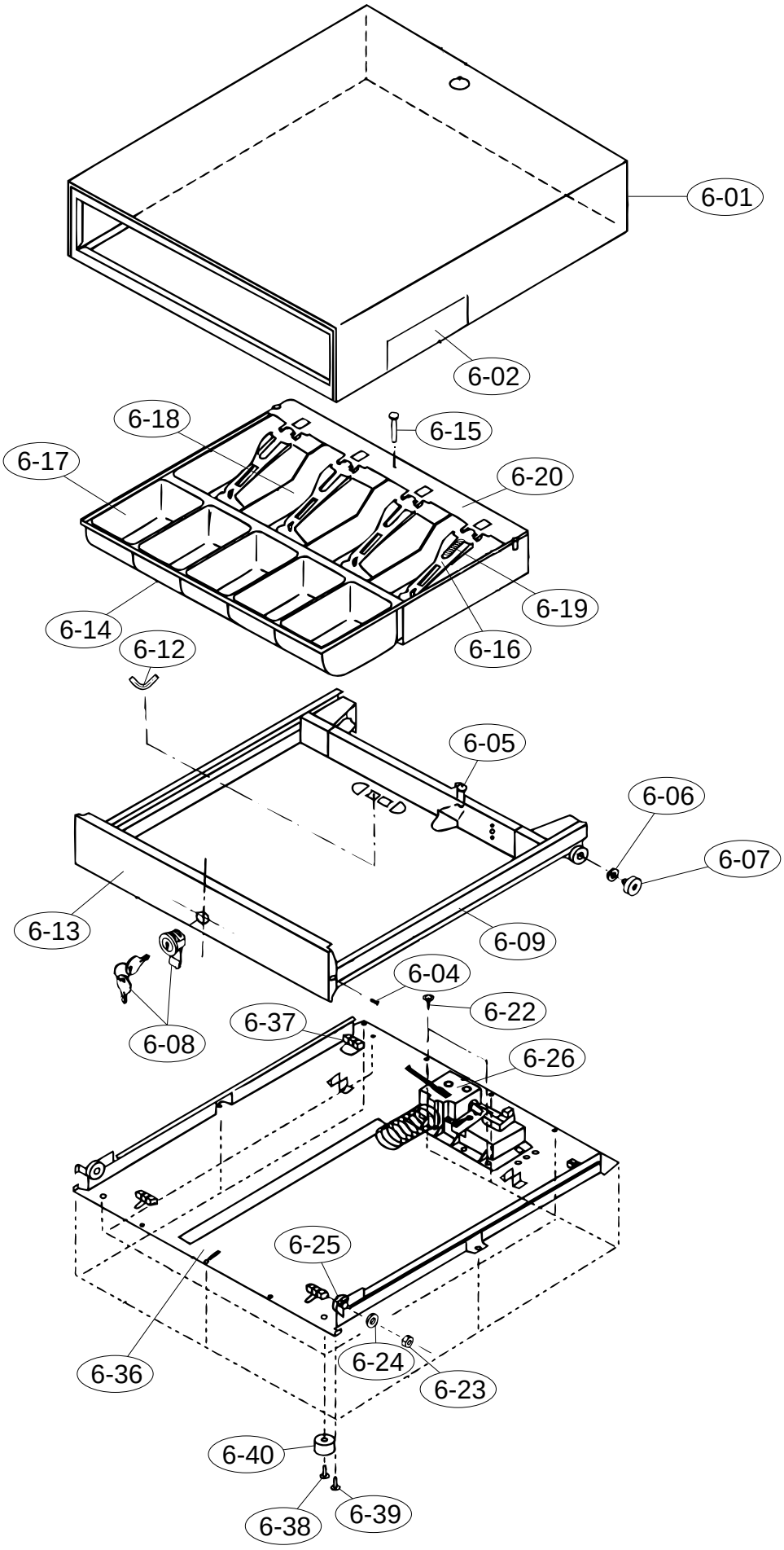
N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		8. Drawer							
		8-1. DL-2350 (Europe)							
N	5-01	6246 5070	Box sub ass'y	E311975*1		1	1		X
N	5-03	6192 6330	Drawer ass'y	E311955*2		1	1		C
	5-40	6221 4893	Rubber foot	ZD01013-A		4	5		X
N	5-02	6246 5130	Drawer label DL-2350	E311977-3		1	50		X
	5-39	5150 1645	Screw with washer	3 X 5 ZMC-3...		10	50		C
	5-38	5150 1644	Screw with washer	4 X 16 ZMC-3...		4	50		C
N	5-09	6246 4950	Drawer sub ass'y	E311927*1		1	1		C
	5-06	5301 5018	Washer	6X13X1 ZMC-3		2	50		X
	5-04	5150 1652	Tapping screw (+)	3.5X8 ZMC-3		2	50		X
	5-05	5200 0106	Rivet	5X30		1	50		X
	5-07	5800 0043	Roller	DR-19B-1.0		2	5		B
N	5-12	6246 5030	Earth spring	E412092-1		1	50		X
N	5-13	6246 4860	Front panel	E211607-2		1	1		X
	5-08	6221 4900	Cylinder lock	ZD20025		1	1		C
N	5-14	6192 6340	Bill/Coin case ass'y	E110387*1		1	1		C
	5-15	5860 0679	Tapping screw (+)	3X8 ZMC-3		3	50		X
	5-16	6221 4902	Bill holder	ZD18931		4	50		A
	5-17	6221 4909	Bill coin case	ZD43651		1	1		C
	5-18	6221 4911	Partition plate	ZD43652		3	1		B
N	5-19	6246 5220	Bill holder spring	E412160-1		4	1		A
N	5-20	6246 5230	Bill holder fixing plate	E211620-1		1	1		C
N		6192 6285	Bottom plate ass'y	E211678*5		1	1		C
N	5-36	6246 4900	Bottom plate	E211623-1		1	1		X
N	5-37	6246 5040	Damper rubber	E412117-1		4	50		X
	5-25	5500 0619	Roller	DR-19B1		2	5		A
	5-23	5150 1643	Hexagonal nut	6...		2	50		X
	5-24	5301 5018	Flat washer	6X13X1 ZMC-3		2	50		X
	5-22	5112 0035	Screw with washer	4X6 ZMC-3		2	50		X
N	5-26	6192 6316	Lock ass'y	E211680*4		1	1		C
N	5-31	6246 4890	Lock fixing stand	E211622-1		1	1		X
N	5-34	6246 5020	Hook lever shaft	E412071-1		1	50		X
N	5-32	6246 4940	Hook lever	E311876-1		1	5		X
N	5-33	6246 5010	Push spring	E412069-1		1	50		C
	5-30	5580 1461	Lock spring	ZD03441-A		1	50		C
N	5-28	5161 5123	Screw (+)	3X8 ZMC-3		2	50		X
N	5-29	5440 0224	Screw with washer	4X14 ZMC-3		1	50		X

DL-2350


5-01
5-02
5-15
5-18
5-17
5-20
5-19
5-14
5-16
5-12
5-05
5-06
5-07
5-13
5-09
5-04
5-22
5-08
5-37
5-26
5-25
5-36
5-23
5-24
5-40
5-38
5-39

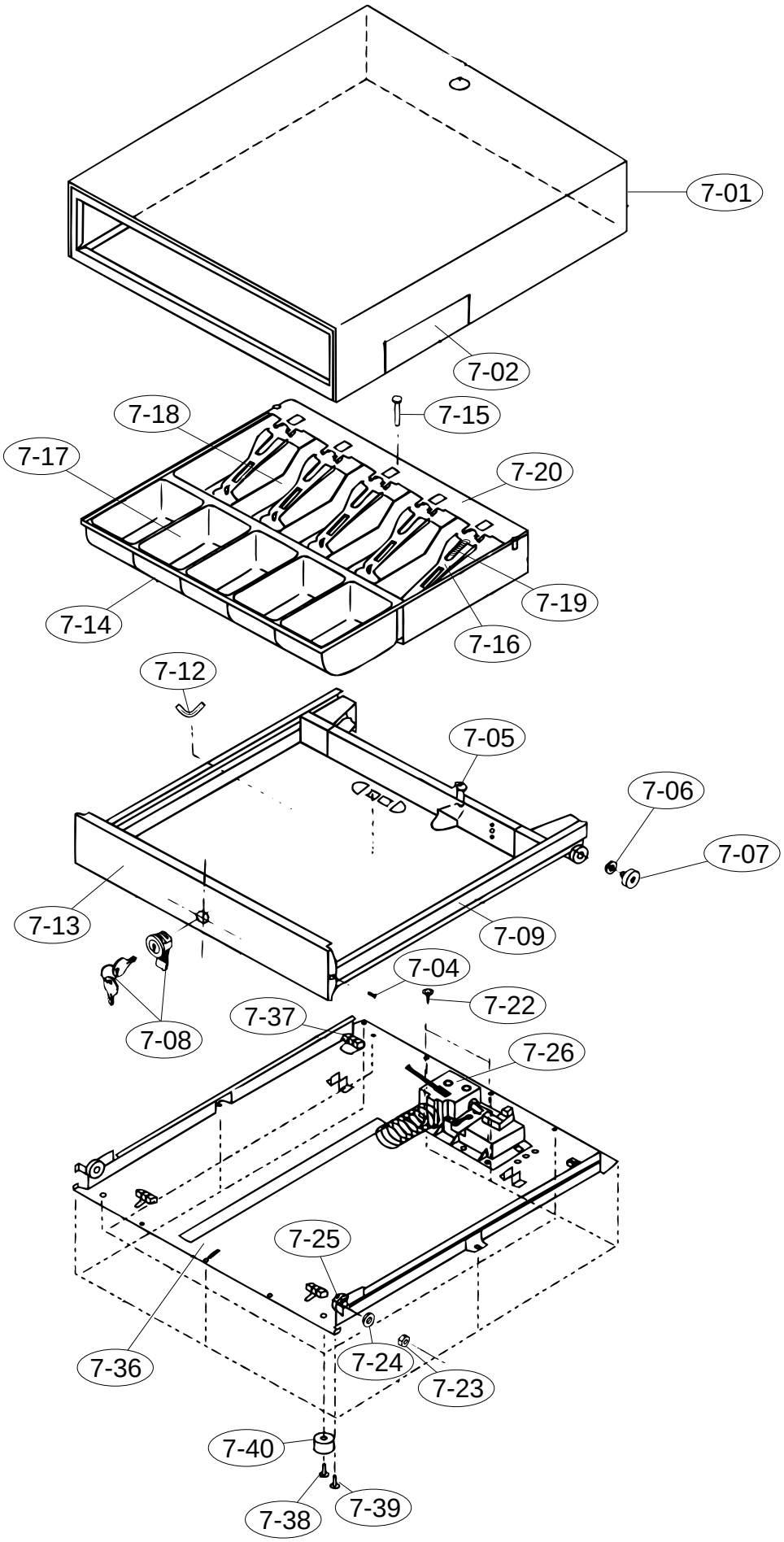
N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		8-2. DL-2351 (Canada)							
N	6-01	6246 5070	Box sub ass'y	E311975*1		1	1		X
N	6-03	6192 6330	Drawer ass'y	E311955*2		1	1		C
N	6-02	6246 5150	Drawer label DL-2351	E311977-5		1	50		X
	6-40	6221 4893	Rubber foot	ZD01013-A		4	5		X
	6-39	5150 1645	Screw with washer	3 X 5 ZMC-3...		10	50		C
	6-38	5150 1644	Screw with washer	4 X 16 ZMC-3...		4	50		C
N	6-09	6246 4950	Drawer sub ass'y	E311927*1		1	1		C
	6-06	5301 5018	Washer	6X13X1 ZMC-3		2	50		X
	6-04	5150 1652	Tapping screw (+)	3.5X8 ZMC-3		2	50		X
	6-05	5200 0106	Rivet	5X30		1	50		X
	6-07	5800 0043	Roller	DR-19B-1.0		2	5		B
N	6-12	6246 5030	Earth spring	E412092-1		1	50		X
N	6-13	6246 4860	Front panel	E211607-2		1	1		X
	6-08	6221 4900	Cylinder lock	ZD20025		1	1		C
N	6-14	6192 6340	Bill/Coin case ass'y	E110387*1		1	1		C
	6-15	5860 0679	Tapping screw (+)	3X8 ZMC-3		3	50		X
	6-16	6221 4902	Bill holder	ZD18931		4	50		A
	6-17	6221 4909	Bill coin case	ZD43651		1	1		C
	6-18	6221 4911	Partition plate	ZD43652		3	1		B
N	6-19	6246 5220	Bill holder spring	E412160-1		4	1		A
N	6-20	6246 5230	Bill holder fixing plate	E221620-1		1	1		C
N		6192 6287	Bottom plate ass'y	E211678*7		1	1		C
N	6-36	6246 4900	Bottom plate	E211623-1		1	1		X
N	6-37	6246 5040	Damper rubber	E412117-1		4	50		X
	6-25	5500 0619	Roller	DR-19B1		2	5		A
	6-23	5150 1643	Hexagonal nut	6...		2	50		X
	6-24	5301 5018	Flat washer	6X13X1 ZMC-3		2	50		X
	6-22	5112 0035	Screw with washer	4X6 ZMC-3		2	50		X
N	6-26	6192 6317	Lock ass'y	E211680*5		1	1		C
N	6-31	6246 4890	Lock fixing stand	E211622-1		1	1		X
N	6-34	6246 5020	Hook lever shaft	E412071-1		1	50		X
N	6-32	6246 4940	Hook lever	E311876-1		1	5		X
N	6-33	6246 5010	Push spring	E412069-1		1	50		C
	6-30	5580 1461	Lock spring	ZD03441-A		1	50		C
N	6-28	5161 5123	Screw (+)	3X8 ZMC-3		2	50		X
N	6-29	5440 0224	Screw with washer	4X14 ZMC-3		1	50		X
N		3000 7231	Micro switch	V-103-1A5		1	1		C
N		5150 1649	Screw with washer	3X16 ZMC-3		1	50		C

DL-2351


6-01
6-02
6-18
6-15
6-17
6-20
6-19
6-14
6-16
6-12
6-05
6-06
6-07
6-13
6-09
6-04
6-22
6-37
6-08
6-26
6-25
6-24
6-23
6-36
6-40
6-38
6-39

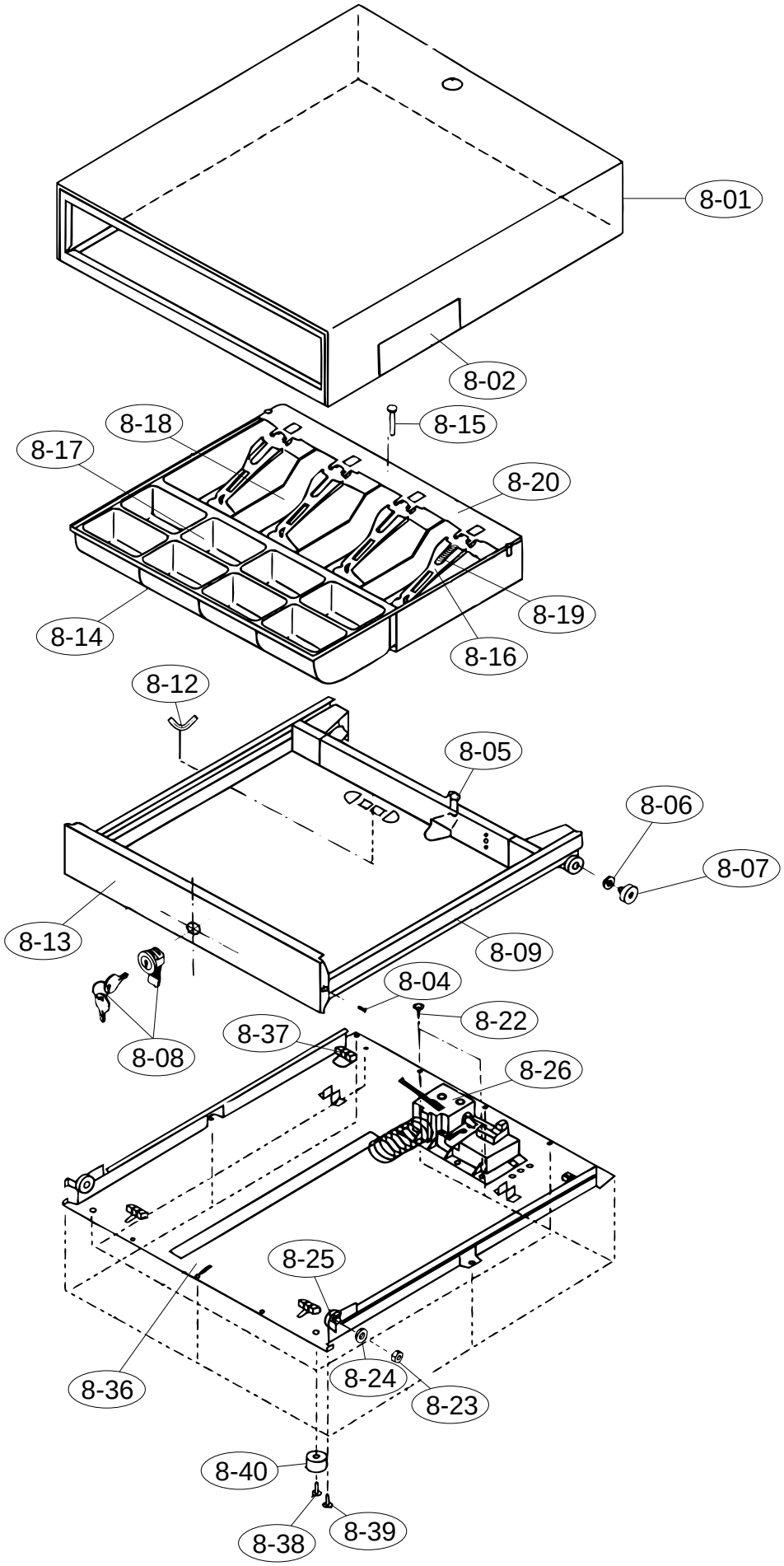
N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		8-3. DL-2416 (U.S.A.)							
N	7-01	6246 5070	Box sub ass'y	E311975*1		1	1		X
N	7-03	6192 6330	Drawer ass'y	E311955*2		1	1		C
N	7-02	6246 5140	Drawer label DL-2416	E311977-4		1	50		X
	7-40	6221 4893	Rubber foot	ZD01013-A		4	5		X
	7-39	5150 1645	Screw with washer	3X5 ZMC-3...		10	50		C
	7-38	5150 1644	Screw with washer	4X16 ZMC-3...		4	50		C
N	7-09	6246 4950	Drawer sub ass'y	E311927*1		1	1		C
	7-06	5301 5018	Washer	6X13X1 ZMC-3		2	50		X
	7-04	5150 1652	Tapping screw (+)	3.5X8 ZMC-3		2	50		X
	7-05	5200 0106	Rivet	5X30		1	50		X
	7-07	5800 0043	Roller	DR-19B-1.0		2	5		B
N	7-12	6246 5030	Earth spring	E412092-1		1	50		X
N	7-13	6246 4860	Front panel	E211607-2		1	1		X
	7-08	6221 4900	Cylinder lock	ZD20025		1	1		C
N	7-14	6192 6350	Bill/Coin case ass'y	E110387*2		1	1		B
	7-18	6221 4911	Partition plate	ZD43652		4	1		B
	7-16	6221 4902	Bill holder	ZD18931		5	50		A
N	7-17	6221 4909	Bill/Coin case	ZD43651		1	1		C
N	7-19	6246 5220	Bill holder spring	E412160-1		5	1		A
	7-20	6246 5240	Bill holder fixing plate	E211621-1		1	1		A
	7-15	5860 0679	Tapping screw (+)	3X8 ZMC-3		3	50		X
N		6192 6287	Bottom plate ass'y	E211678*7		1	1		C
N	7-36	6246 4900	Bottom plate	E211623-1		1	1		X
N	7-37	6246 5040	Damper rubber	E412117-1		4	50		X
	7-25	5500 0619	Roller	DR-19B1		2	50		A
	7-23	5150 1643	Hexagonal nut	6...		2	50		X
	7-24	5301 5018	Flat washer	6X13X1 ZMC-3		2	50		X
	7-22	5112 0035	Screw with washer	4X6 ZMC-3		2	50		X
N	7-26	6192 6317	Lock ass'y	E211680*5		1	1		C
N	7-31	6246 4890	Lock fixing stand	E211622-1		1	1		X
N	7-34	6246 5020	Hook lever shaft	E412071-1		1	50		X
N	7-32	6246 4940	Hook lever	E311876-1		1	5		X
N	7-33	6246 5010	Push spring	E412069-1		1	50		C
	7-30	5580 1461	Lock spring	ZD03441-A		1	50		C
N	7-28	5161 5123	Screw (+)	3X8 ZMC-3		2	50		X
N	7-29	5440 0224	Screw with washer	4X14 ZMC-3		1	50		X
N		3000 7231	Micro switch	V-103-1A5		1	1		C
N		5150 1649	Screw with washer	3X16 ZMC-3		1	50		C

DL-2416


7-01
7-02
7-15
7-18
7-17
7-20
7-19
7-14
7-16
7-12
7-05
7-06
7-07
7-13
7-09
7-04
7-22
7-37
7-08
7-26
7-25
7-36
7-24
7-23
7-40
7-38
7-39

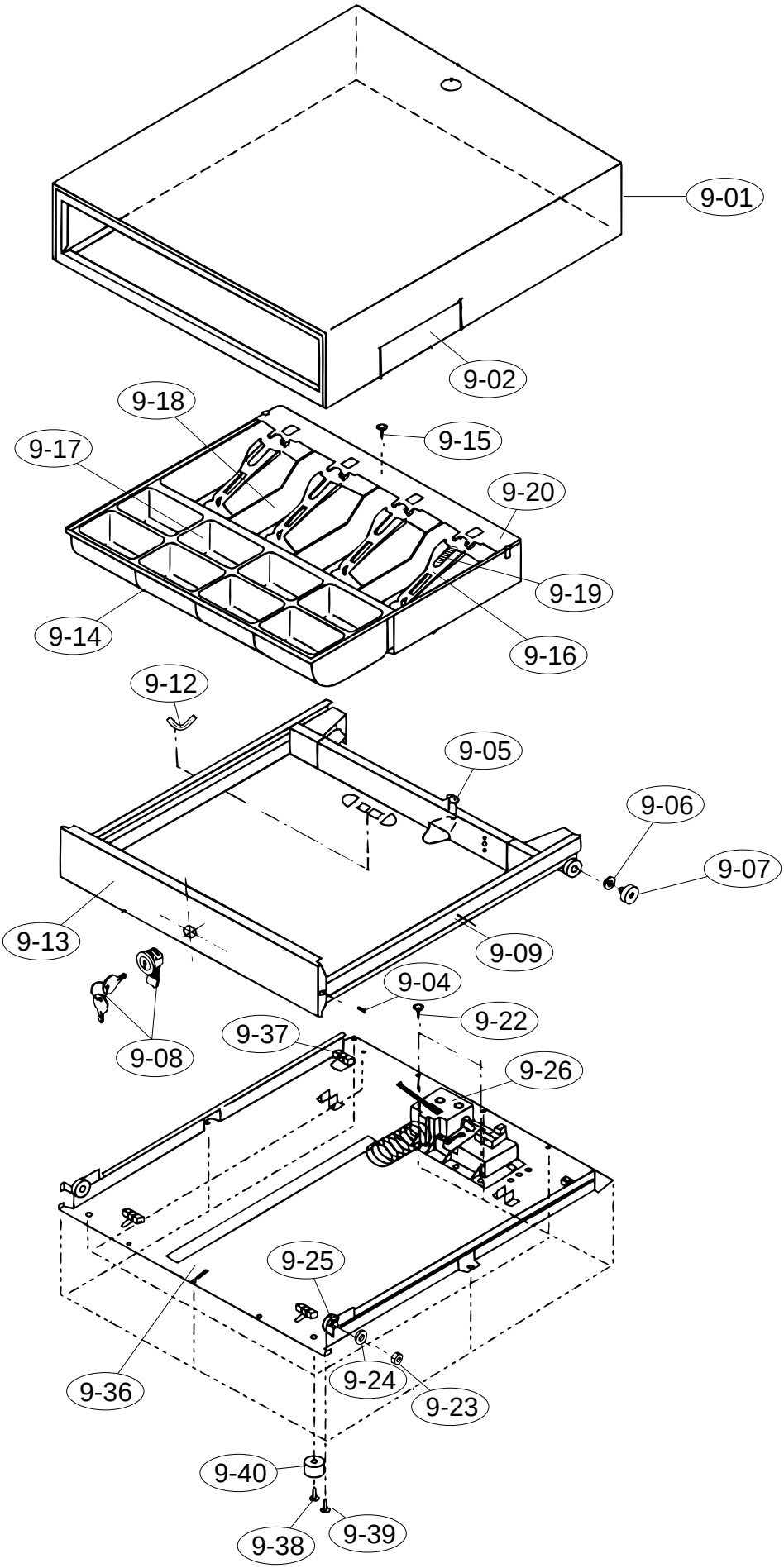
N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
			8-4. DL-2750 (Japan, Germany, Europe)						
N	8-01	6246 5070	Box sub ass'y	E311975*1		1	1		X
N	8-03	6192 6330	Drawer ass'y	E311955*2		1	1		C
N	8-02	6246 5160	Drawer label DL-2750	E311977-6		1	50		X
	8-40	6221 4893	Rubber foot	ZD01013-A		4	5		X
	8-39	5150 1645	Screw with washer	3 X 5 ZMC-3...		10	50		C
	8-38	5150 1644	Screw with washer	4 X 16 ZMC-3...		4	50		C
N	8-09	6246 4950	Drawer sub ass'y	E311927*1		1	1		C
	8-06	5301 5018	Washer	6X13X1 ZMC-3		2	50		X
	8-04	5150 1652	Tapping screw (+)	3.5X8 ZMC-3		2	50		X
	8-05	5200 0106	Rivet	5X30		1	50		X
	8-07	5800 0043	Roller	DR-19B-1.0		2	5		B
N	8-12	6246 5030	Earth spring	E412092-1		1	50		X
N	8-13	6246 4860	Front panel	E211607-2		1	1		X
	8-08	6221 4900	Cylinder lock	ZD20025		1	1		C
	8-14	6192 6360	Bill/Coin case ass'y	E110387*3		1	1		B
	8-15	5860 0679	Tapping screw (+)	3X8 ZMC-3..		3	50		X
	8-16	6221 4902	Bill holder	ZD18931		4	50		A
N	8-17	6221 4910	Bill coin case	ZD43751		1	1		C
	8-18	6221 4911	Partition plate	ZD43652		3	1		B
N	8-19	6246 5220	Bill holder spring	E412160-1		4	1		A
N	8-20	6246 5230	Bill holder fixing plate	E221620-1		1	1		C
N		6192 6285	Bottom plate ass'y	E211678*5		1	1		C
N	8-36	6246 4900	Bottom plate	E211623-1		1	1		X
N	8-37	6246 5040	Damper rubber	E412117-1		4	50		X
	8-25	5500 0619	Roller	DR-19B1		2	5		A
	8-23	5150 1643	Hexagonal nut	6...		2	50		X
	8-24	5301 5018	Flat washer	6X13X1 ZMC-3		2	50		X
	8-22	5112 0035	Screw with washer	4X6 ZMC-3		2	50		X
N	8-26	6192 6316	Lock ass'y	E211680*4		1	1		C
N	8-31	6246 4890	Lock fixing stand	E211622-1		1	1		X
N	8-34	6246 5020	Hook lever shaft	E412071-1		1	50		X
N	8-32	6246 4940	Hook lever	E311876-1		1	5		X
N	8-33	6246 5010	Push spring	E412069-1		1	50		C
	8-30	5580 1461	Lock spring	ZD03441-A		1	50		C
N	8-28	5161 5123	Screw (+)	3X8 ZMC-3		2	50		X
N	8-29	5440 0224	Screw with washer	4X14 ZMC-3		1	50		X
			Rubber foot	E4121361		10	50		X

DL-2750


8-01
8-02
8-15
8-18
8-17
8-20
8-19
8-14
8-16
8-12
8-05
8-06
8-07
8-13
8-09
8-04
8-22
8-37
8-26
8-08
8-25
8-36
8-24
8-23
8-40
8-38
8-39

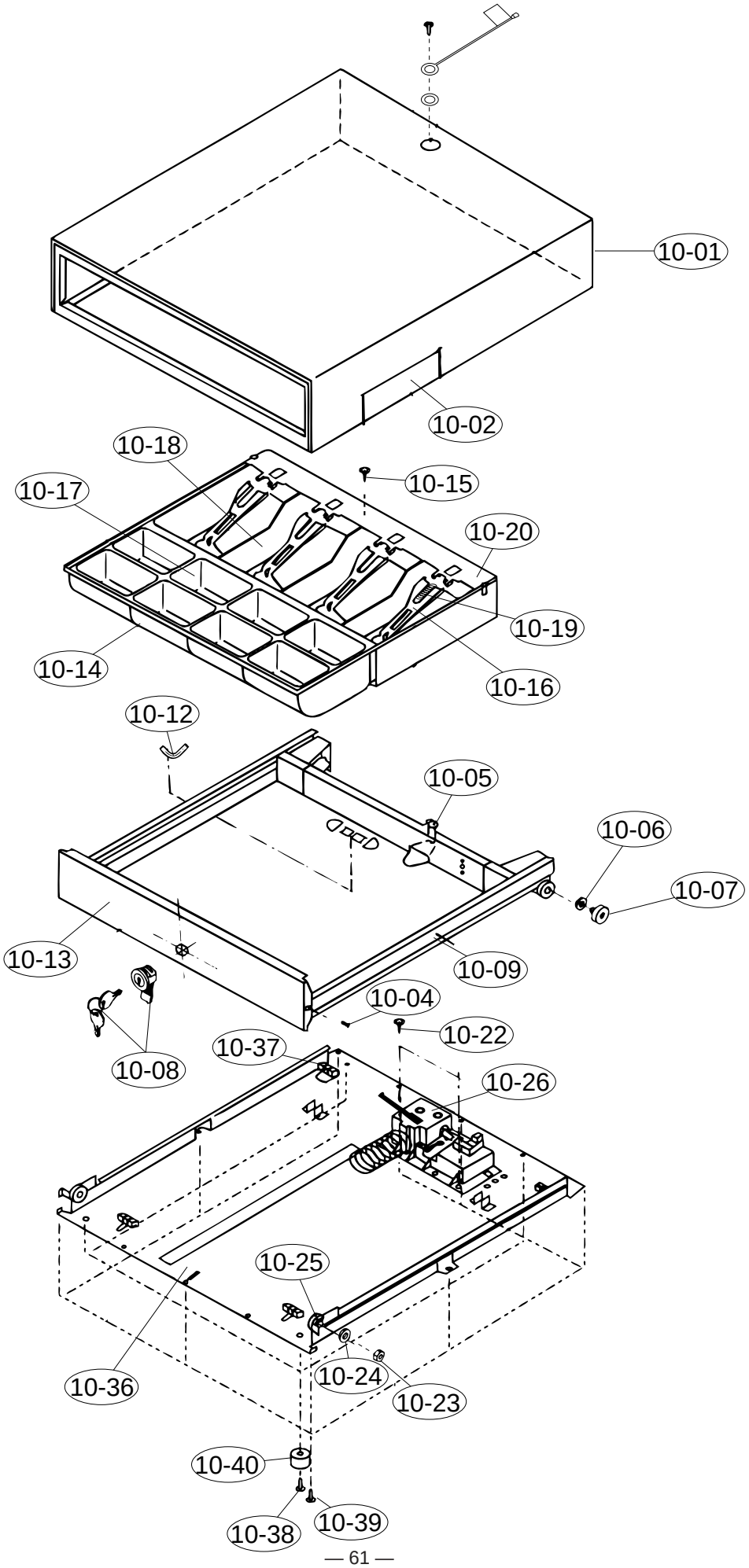
N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		8-5. DL-2751 (U.K.)							
N	9-01	6246 5070	Box sub ass'y	E311975*1		1	1		X
N	9-03	6192 6330	Drawer ass'y	E311955*2		1	1		C
N	9-02	6246 5170	Drawer label DL-2751	E311977-7		1	50		X
	9-40	6221 4893	Rubber foot	ZD01013-A		4	5		C
	9-39	5150 1645	Screw with washer	3 X 5 ZMC-3...		10	50		C
	9-38	5150 1644	Screw with washer	4 X 16 ZMC-3...		4	50		C
N	9-09	6246 4950	Drawer sub ass'y	E311927*1		1	1		C
	9-06	5301 5018	Washer	6X13X1 ZMC-3		2	50		X
	9-04	5150 1652	Tapping screw (+)	3.5X8 ZMC-3		2	50		X
	9-05	5200 0106	Rivet	5X30		1	50		X
	9-07	5800 0043	Roller	DR-19B-1.0		2	5		B
N	9-12	6246 5030	Earth spring	E412092-1		1	50		X
N	9-13	6246 4860	Front panel	E211607-2		1	1		X
	9-08	6221 4900	Cylinder lock	ZD20025		1	1		C
N	9-14	6192 6360	Bill/Coin case ass'y	E110387*3		1	1		B
	9-15	5860 0679	Tapping screw (+)	3X8 ZMC-3..		3	50		X
	9-16	6221 4902	Bill holder	ZD18931		4	50		A
N	9-17	6221 4910	Bill coin case	ZD43751		1	1		C
	9-18	6221 4911	Partition plate	ZD43652		3	1		B
N	9-19	6246 5220	Bill holder spring	E412160-1		4	1		A
N	9-20	6246 5230	Bill holder fixing plate	E221620-1		1	1		C
N		6192 6287	Bottom plate ass'y	E211678*7		1	1		C
N	9-36	6246 4900	Bottom plate	E211623-1		1	1		X
N	9-37	6246 5040	Damper rubber	E412117-1		4	50		X
	9-25	5500 0619	Roller	DR-19B1		2	5		A
	9-23	5150 1643	Hexagonal nut	6...		2	50		X
	9-24	5301 5018	Flat washer	6X13X1 ZMC-3		2	50		X
	9-22	5112 0035	Screw with washer	4X6 ZMC-3		2	50		X
N	9-26	6192 6318	Lock ass'y	E211680*5		1	1		C
N	9-31	6246 4890	Lock fixing stand	E211622-1		1	1		X
N	9-34	6246 5020	Hook lever shaft	E412071-1		1	50		X
N	9-32	6246 4940	Hook lever	E311876-1		1	5		X
N	9-33	6246 5010	Push spring	E412069-1		1	50		C
	9-30	5580 1461	Lock spring	ZD03441-A		1	50		C
N	9-28	5161 5123	Screw (+)	3X8 ZMC-3		2	50		X
N	9-29	5440 0224	Screw with washer	4X14 ZMC-3		1	50		X
N		3000 7231	Micro switch	V-103-1A5		1	1		C
N		5140 1649	Screw with washer	3X16 ZMC-3		1	50		X
			Rubber foot	E4121361		10	50		X

DL-2751


9-01
9-02
9-18
9-17
9-15
9-20
9-19
9-14
9-16
9-12
9-05
9-06
9-07
9-13
9-09
9-04
9-22
9-08
9-37
9-26
9-25
9-36
9-24
9-23
9-40
9-38
9-39

N	Item	Code No.	Parts Name	Specification	Version	Q	M	FOB Japan N.R.Yen Unit Price	R
		8-6. DL-2752 (Germany)							
N	10-01	6246 4980	Box sub ass'y	E311976*1		1	1		X
N	10-03	6192 6330	Drawer ass'y	E311955*2		1	1		C
N	10-02	6246 4990	Drawer label DL-2752	E311977-8		1	50		X
	10-40	6221 4893	Rubber foot	ZD01013-A		4	5		C
	10-39	5150 1645	Screw with washer	3 X 5 ZMC-3...		11	50		C
	10-38	5150 1644	Screw with washer	4 X 16 ZMC-3...		4	50		C
N	10-09	6246 4950	Drawer sub ass'y	E311927*1		1	1		C
	10-06	5301 5018	Washer	6X13X1 ZMC-3		2	50		X
	10-04	5150 1652	Tapping screw (+)	3.5X8 ZMC-3		2	50		X
	10-05	5200 0106	Rivet	5X30		1	50		X
	10-07	5800 0043	Roller	DR-19B-1.0		2	5		B
N	10-12	6246 5030	Earth spring	E412092-1		1	50		X
N	10-13	6246 4860	Front panel	E211607-2		1	1		X
	10-08	6221 4900	Cylinder lock	ZD20025		1	1		C
N	10-14	6192 6360	Bill/Coin case ass'y	E110387*3		1	1		B
	10-15	5860 0679	Tapping screw (+)	3X8 ZMC-3..		3	50		X
	10-16	6221 4902	Bill holder	ZD18931		4	50		A
N	10-17	6221 4910	Bill coin case	ZD43751		1	1		C
	10-18	6221 4911	Partition plate	ZD43652		3	1		B
N	10-19	6246 5220	Bill holder spring	E412160-1		4	1		A
N	10-20	6246 5230	Bill holder fixing plate	E221620-1		1	1		C
N		6192 6290	Bottom plate ass'y	E211678*10		1	1		C
N	10-36	6246 4900	Bottom plate	E211623-1		1	1		X
N	10-37	6246 5040	Damper rubber	E412117-1		4	50		X
	10-25	5500 0619	Roller	DR-19B1		2	5		A
	10-23	5150 1643	Hexagonal nut	6...		2	50		X
	10-24	5301 5018	Flat washer	6X13X1 ZMC-3		2	50		X
	10-22	5112 0035	Screw with washer	4X6 ZMC-3		2	50		X
N	10-26	6192 6310	Lock ass'y	E211680*8		1	1		C
N	10-31	6246 4890	Lock fixing stand	E211622-1		1	1		X
N	10-34	6246 5020	Hook lever shaft	E412071-1		1	50		X
N	10-32	6246 4940	Hook lever	E311876-1		1	5		X
N	10-33	6246 5010	Push spring	E412069-1		1	50		C
	10-30	5580 1461	Lock spring	ZD03441-A		1	50		C
N	10-28	5161 5123	Screw (+)	3X8 ZMC-3		2	50		X
N	10-29	5440 0224	Screw with washer	4X14 ZMC-3		1	50		X
N		3000 7231	Micro switch	V-103-1A5		1	1		C
N		5140 1649	Screw with washer	3X16 ZMC-3		1	50		X

DL-2752


10-01
10-02
10-18
10-15
10-17
10-20
10-19
10-14
10-16
10-12
10-05
10-06
10-07
10-13
10-09
10-04
10-22
10-37
10-08
10-26
10-25
10-36
10-24
10-23
10-40
10-38
10-39

CASIO COMPUTER CO.,LTD.
Service Division

8-11-10, Nishi-Shinjuku
Shinjuku-ku, Tokyo 160, Japan
Telephone: 03-3347-4926